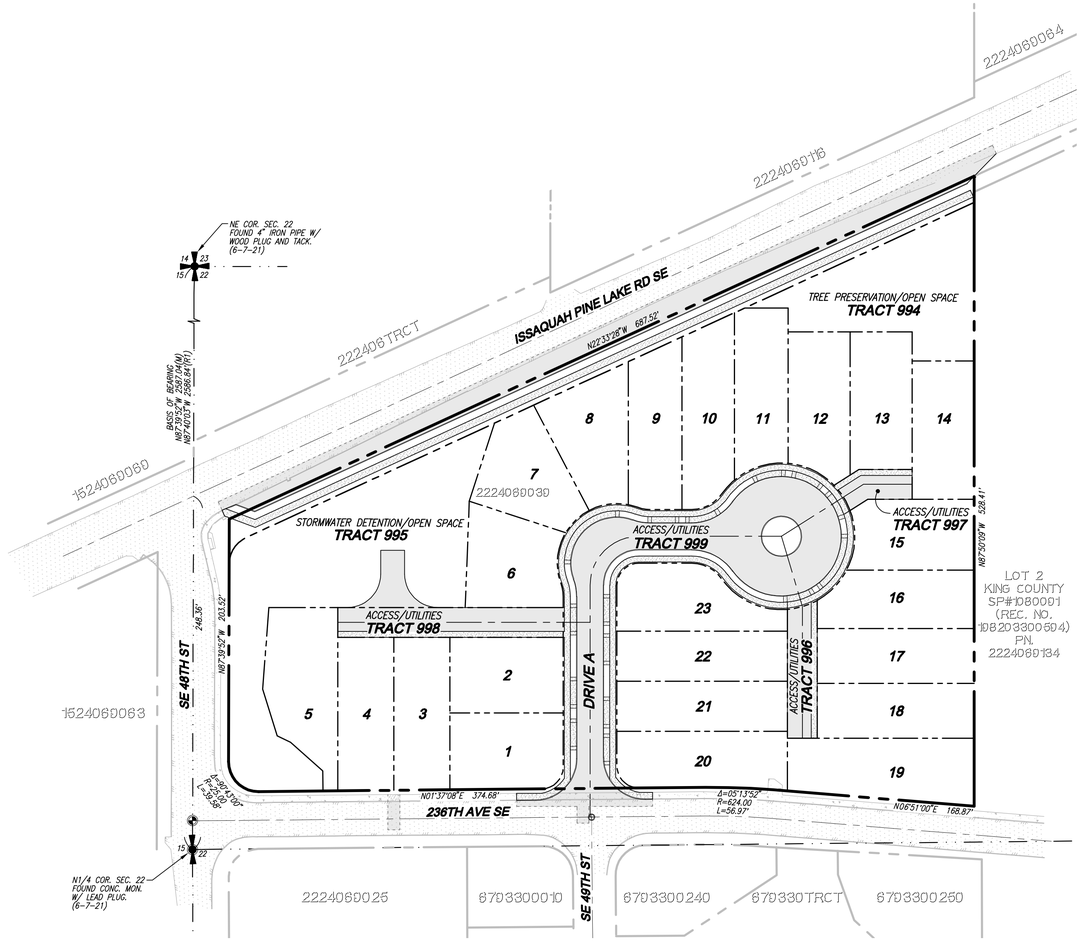
A PORTION OF THE N 1/2 OF THE NW 1/4 OF SEC 22, TWN 24 N, RGE 6 E, W.M., KING COUNTY, WASHINGTON

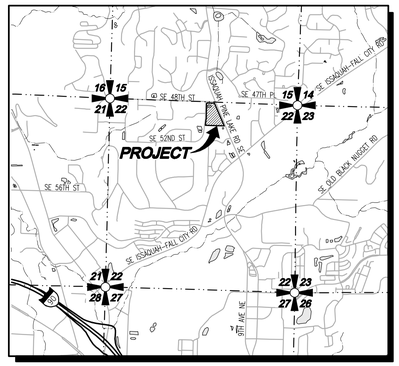
PARKLAND HEIGHTS

PRELIMINARY PLANS

SCALE: 1" = 60'

60' 0 60' 120'





VICINITY MAP

SCALE: 1"=2000'

LEGEND AND ABBREVIATIONS

EXISTING SYMBOLS

SYMBOL	DESCRIPTION
	SECTION CORNER FOUND
	SECTION QTR CORNER FOUND
	SECTION CORNER CALC'D
	SECTION QTR CORNER CALCED
	MONUMENT IN CASE
	MONUMENT CALC'D
	FOUND REBAR & CAP AS NOTED
	SET REBAR & CAP (PLS 52841 & 20109918)
	SIGN POST
	MAILBOX
	CATCH BASIN
	STORM MANHOLE
	CULVERT
	FIRE HYDRANT
	WATER VALVE
	WATER METER
ICV	IRRIGATION CONTROL VALVE
	GAS VALVE
	GUY ANCHOR
	UTILITY/POWER POLE
PV	POWER VAULT
	POWER TRANSFORMER
S	SANITARY SEWER MANHOLE
	CONIFEROUS TREE
	DECIDUOUS TREE
X	METAL FENCING
GPM	GAS PAINT MARK
WPM	WATER PAINT MARK
PPM	POWER PAINT MARK
SPM	SEWER PAINT MARK
TPM	TELEPHONE PAINT MARK
UG	UNDERGROUND POWER

ABBREVIATIONS

CB	CATCH BASIN
℄	CENTERLINE
CMP	CORRUGATED METAL PIPE
CP	CONCRETE PIPE
CCP	CONCRETE CYLINDER PIPE
EL	ELEVATION
EXIST.	EXISTING
℄	FLOWLINE
IE	INVERT ELEVATION
LCPE	LINED CORRUGATED POLYETHYLENE PIPE
℄	PROPERTY LINE
POB	POINT OF BEGINNING
PP	POWER POLE
PVC	POLYVINYL CHLORIDE PIPE
R/W	RIGHT-OF-WAY
STA	STATION
SD	STORM DRAIN
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SWPE	SOLID WALL POLYETHYLENE PIPE
TYP	TYPICAL
TBR	TO BE REMOVED
WPM	WATER PAINT MARK
A	ALDER
C	CEDAR
CW	COTTONWOOD
HEM	HEMLOCK
H	HOLLY
M	MAPLE
P	PINE
S	SPRUCE
U	UNKNOWN

PROPOSED STORM SYMBOLS

SYMBOL	DESCRIPTION
	SD CAP
	TYPE 1 CATCH BASIN, GRATED LID
	TYPE 1 CATCH BASIN, SOLID LID
	TYPE 2 CATCH BASIN, GRATED LID
	TYPE 2 CATCH BASIN, SOLID LID
	BEEHIVE MANHOLE COVER
	SQUARE YARD DRAIN
	ROUND YARD DRAIN
	STORM CLEAN OUT
	STORM PIPE

PROPOSED WATER SYMBOLS

SYMBOL	DESCRIPTION
	WATER CAP
	CONCRETE BLOCKING
	BUTTERFLY VALVE
	11° BEND
	45° BEND
	90° BEND
	22° BEND
	VALVE
	HYDRANT ASSEMBLY
	BLOW-OFF VALVE
	REDUCER
	AIR-VAC ASSEMBLY
	WATER METER
	WATER PIPE

PROPOSED SEWER SYMBOLS

SYMBOL	DESCRIPTION
	SEWER CAP
	SEWER CLEANOUT
	SEWER MANHOLE
	SEWER PIPE

SURVEY INFORMATION

LEGAL DESCRIPTION

QUIT CLAIM DEED RECORDING NO. 201505000960

THAT PORTION OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 22, TOWNSHIP 24, NORTH, RANGE 6 EAST, WILLAMETTE MERIDIAN, IN KING COUNTY, WASHINGTON, LYING WESTERLY OF THE SOUTHWESTERLY MARGIN OF VAUGHN HILL ROAD EXTENSION (ALSO KNOWN AS ISSAQUAH-PINE LAKE ROAD SOUTHEAST);EXCEPT THE NORTH 30 FEET THEREOF CONVEYED TO KING COUNTY FOR ROAD PURPOSES BY DEED RECORDED UNDER RECORDING NUMBER 2440235;AND EXCEPT THE PORTION CONVEYED TO THE CITY OF ISSAQUAH, STATE OF WASHINGTON FOR ROAD PURPOSES BY DEED RECORDED UNDER RECORDING NUMBER 20130215000971;

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

HORIZONTAL DATUM

NAD 83/91
WASHINGTON STATE COORDINATES-NORTH ZONE

VERTICAL DATUM

NORTH AMERICAN VERTICAL DATUM-1988

SITE BENCHMARK

PROJECT BENCHMARK: (NORTH AMERICAN VERTICAL DATUM-1988)

MONUMENT IN CASE AT N1/4 CORNER SECTION 22, T24N, R6E, WM
KING COUNTY SURVEY PT #2286
PUBLISHED ELEVATION = 397.51 FEET

BASIS OF BEARING

NAD83/91 FROM GPS OBSERVATION
MONUMENTED NORTH LINE OF THE NE QUARTER OF SECTION 22, TOWNSHIP 24 NORTH, RANGE 6 E: (BEARING = N 87°39'52" W)

REFERENCES

(R1) CITY OF ISSAQUAH LOT LINE ADJUSTMENT NO. PLN04-00065
REC. NO. 20041014900002

(R2) PLAT OF ASPEN MEADOWS
REC. NO. 20010322001027

(R3) RECORD OF SURVEY
REC NO. 198207149002

(R4) KING COUNTY SHORT PLAT NO. 589S0278
REC. NO. 199809239015

(R5) RECORD OF SURVEY
REC NO. 198210209005

(R6) SLOPE EASEMENT
REC. NO. 20130215000972

(R7) QUIT CLAIM DEED
REC. NO. 20130215000971

EQUIPMENT & PROCEDURES

METHOD OF SURVEY:
SURVEY PERFORMED BY FIELD TRAVERSE
INSTRUMENTATION:
LEICA MS-50 ROBOTIC TOTAL STATION WITH DATA COLLECTOR AND LEICA GS-16 GPS MAINTAINED IN ADJUSTMENT TO MANUFACTURES SPECIFICATIONS AS REQUIRED BY WAC 332-130-100
PRECISION:
MEETS OR EXCEEDS STATE STANDARDS WAC 332-130-090

PROJECT INFORMATION

TAX PARCELS:	2224069039
SITE ADDRESS:	4929 ISSAQUAH-PINE LAKE RD SE ISSAQUAH, WA 98029
SITE AREA:	232,555 SF 5.34 AC
CURRENT ZONING:	SF-SL
PROPOSED ZONING:	SF-SL
PROPOSED LAND USE:	RESIDENTIAL
PROPOSED LOTS:	23
WATER:	CITY OF ISSAQUAH
SEWER:	CITY OF ISSAQUAH
POWER:	PUGET SOUND ENERGY
GAS:	PUGET SOUND ENERGY
TELEPHONE:	COMCAST
CABLE:	COMCAST
SCHOOL DISTRICT:	ISSAQUAH #411
FIRE DISTRICT:	EASTSIDE FIRE
REQUIRED MINIMUM SETBACKS:	
FRONT:	10'
REAR:	20'
SIDE:	6'

DISTURBED AREA

DISTURBED AREA: 231,188 SF (5.30 AC)

CONTACT LIST

APPLICANT:
DR HORTON - SEATTLE DIVISION
11241 SLATER AVE NE, SUITE 200
KIRKLAND, WASHINGTON 98033
CONTACT: JON BEEM
PHONE: (425) 821-3400 ex. 5406
CELL: (425) 324-0572
EMAIL: jbeem@drhorton.com

CIVIL ENGINEER:
LDC, INC.
20210 142ND AVE NE
WOODINVILLE, WA 98072
CONTACT: TOM ABBOTT, PE
PHONE: (425) 806-1869
FAX: (425) 482-2893
EMAIL: tabbott@ldccorp.com

SURVEYOR:
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CONTACT: VINCE TOWNSEND, PLS
PHONE: (425) 806-1869
FAX: (425) 482-2893
EMAIL: vtownsend@ldccorp.com

LANDSCAPE ARCHITECT:
CRAMER DESIGN CONSULTANTS, INC
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BOTHELL, WASHINGTON 98012
CONTACT: GAYLE CRAMER
PHONE: (425) 241-6258
EMAIL: cdclso@frontier.com

ARBORIST:
CREATIVE LANDSCAPE SOLUTIONS
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REDMOND, WASHINGTON 98052
CONTACT: SUSAN PRINCE
PHONE: (425) 890-3808
EMAIL: sprince202@aol.com

WETLAND BIOLOGIST:
ACRE ENVIRONMENTAL CONSULTING, LLC.
17715 28TH AVE NE
LAKE FOREST PARK, WASHINGTON 98155
CONTACT: LOUIS EMENHISER
PHONE: (206) 450-7746
EMAIL: louis@acreenvironmental.com

TRAFFIC ENGINEER:
KIMLEY-HORN
22722 29TH DR SE, SUITE 100
BOTHELL, WA 98021
CONTACT: BRAD LINCOLN, PE
PHONE: (425) 708-8275
EMAIL: Brad.Lincoln@kimley-horn.com

GEOTECHNICAL ENGINEER:
THE RILEY GROUP, INC.
17522 BOTHELL WAY NE
BOTHELL, WA 98011
CONTACT: KRISTINA WELLER, PE
PHONE: (425) 415-0551
FAX: (425) 415-0311

TABLE OF CONTENTS

UTILITY NOTE

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DISCLAIMER

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811 or 1-800-424-5555
Utilities Underground Location Center

REVISIONS

NO.	DATE	DESCRIPTION	BY

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Kent | Olympia
20210 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869 www.LDCorp.com F 425.482.2893

DR HORTON

PARKLAND HEIGHTS

COVER SHEET

THOMAS P. ABBOTT STATE OF WASHINGTON 56921 REGISTERED PROFESSIONAL ENGINEER

JOB NUMBER:	C21-124
DRAWING NAME:	C21124P-CS-PL
DESIGNER:	TPA
DRAFTING BY:	RCR
DATE:	6-25-21
SCALE:	1"=60'
JURISDICTION:	ISSAQUAH

CS-01

SHEET 1 OF 11

Drawing: P:\Civil\2021\c21-124 madison\Drawings\preliminary\C21124P-CS-PL.dwg Plotted: Jun 20, 2022 - 7:37am

A PORTION OF THE N 1/2 OF THE NW 1/4 OF SEC 22, TWN 24 N, RGE 6 E, W.M., KING COUNTY, WASHINGTON

SURVEY INFORMATION

LEGAL DESCRIPTION

QUIT CLAIM DEED RECORDING NO. 20150505000960

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PUBLISHED ELEVATION = 397.51 FEET

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MONUMENTED NORTH LINE OF THE NE QUARTER OF SECTION 22, TOWNSHIP 24 NORTH, RANGE 6 E: (BEARING = N 87°39'52" W)

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REC. NO. 20130215000972

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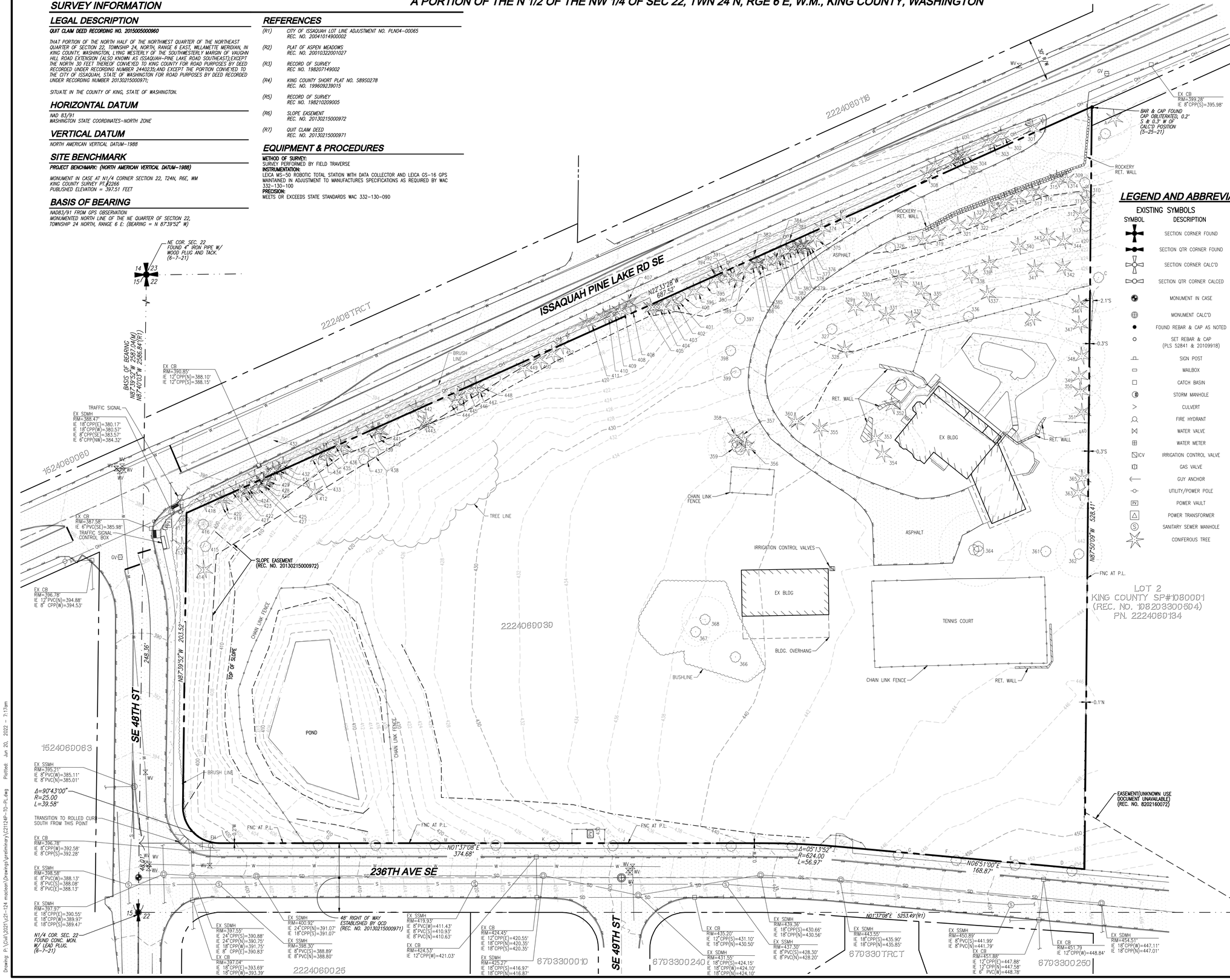
PRECISION:
MEETS OR EXCEEDS STATE STANDARDS WAC 332–130–090



LEGEND AND ABBREVIATIONS

EXISTING SYMBOLS

SYMBOL	DESCRIPTION
	SECTION CORNER FOUND
	SECTION QTR CORNER FOUND
	SECTION CORNER CALC'D
	SECTION QTR CORNER CALCED
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	CATCH BASIN
	STORM MANHOLE
	CULVERT
	FIRE HYDRANT
	WATER VALVE
	WATER METER
ICV	IRRIGATION CONTROL VALVE
	GAS VALVE
	GUY ANCHOR
	UTILITY/POWER POLE
PV	POWER VAULT
	POWER TRANSFORMER
S	SANITARY SEWER MANHOLE
	CONIFEROUS TREE

ABBREVIATIONS

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PP	POWER POLE
PVC	POLYVINYL CHLORIDE PIPE
R/W	RIGHT–OF–WAY
STA	STATION
SD	STORM DRAIN
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SWPE	SOLID WALL POLYETHYLENE PIPE
TYP	TYPICAL
TBR	TO BE REMOVED

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811 or 1–800–424–5555
Utilities Underground Location Center

REVISIONS

NO.	DATE	DESCRIPTION	BY

LDC | Surveying Engineering Planning
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Woodinville
20210 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869 www.LDCorp.com F 425.482.2893

DR HORTON

PARKLAND HEIGHTS

EXISTING CONDITIONS MAP

THOMAS P. ABBOTT
STATE OF WASHINGTON
56921
REGISTERED
PROFESSIONAL ENGINEER
6-30-21

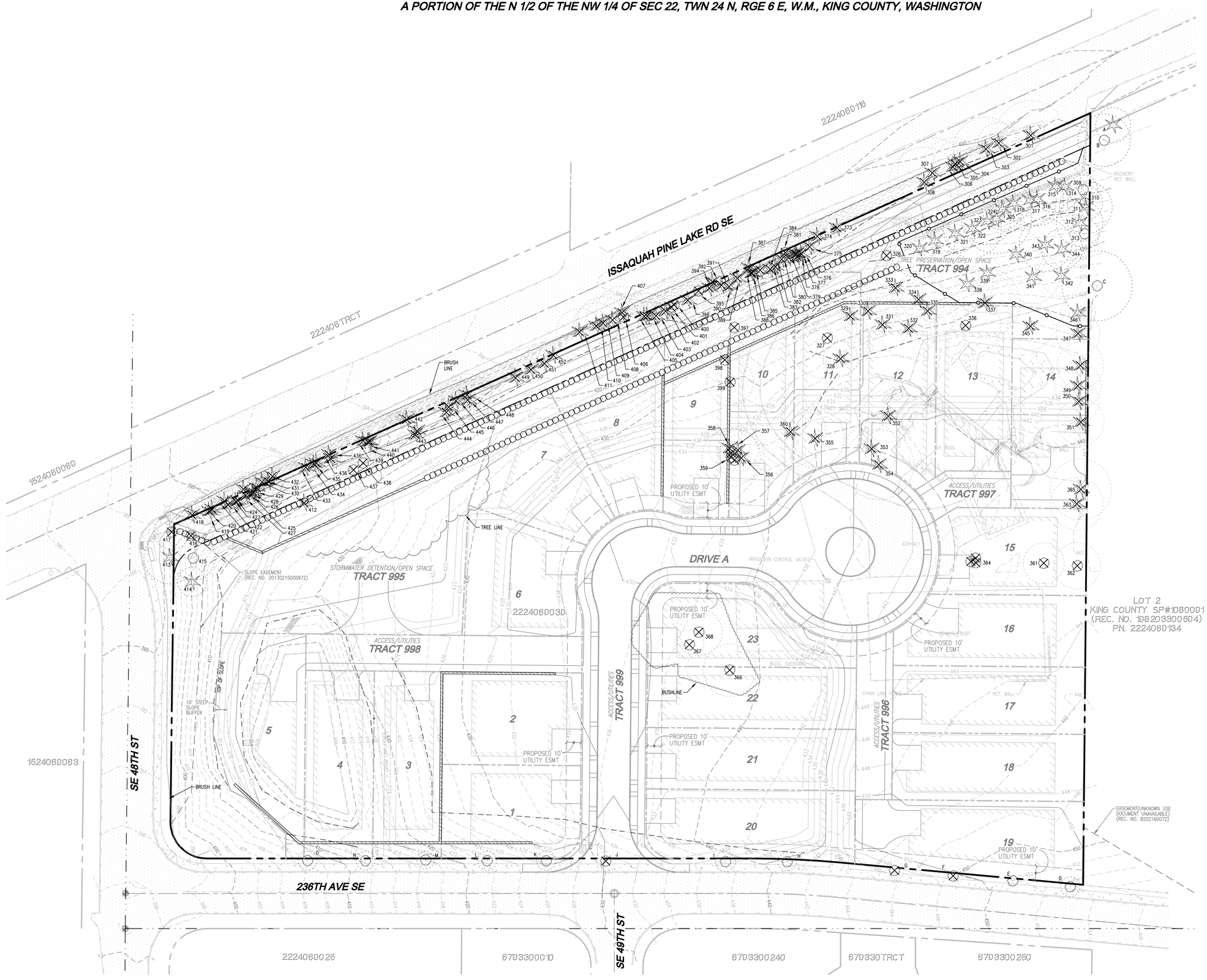
JOB NUMBER:	C21–124
DRAWING NAME:	C21124P–TO–PL
DESIGNER:	TPA
DRAFTING BY:	RCR
DATE:	6–25–21
SCALE:	1" = 30'
JURISDICTION:	ISSAQUAH

TO-01

SHEET 2 OF 11

Drawing: P:\Civil\2021\c21–124 madsen\Drawings\preliminary\C21124P–TO–PL.dwg Plotted: Jun 20, 2022 – 7:17am

A PORTION OF THE N 1/2 OF THE NW 1/4 OF SEC 22, TWN 24 N, RGE 6 E, W.M., KING COUNTY, WASHINGTON



SCALE: 1" = 30'

30' 0 30' 60'

LEGEND

- DECIDUOUS TREE TO BE RETAINED
- CONIFEROUS TREE TO BE RETAINED
- ## DECIDUOUS TREE TO BE REMOVED
- ## CONIFEROUS TREE TO BE REMOVED
- LOCK N LOAD RETAINING WALL
- ROCKERY RETAINING WALL
- TREE PROTECTION FENCING

TREE CALCULATIONS

REQUIRED DBH:	406"
RETAINED DBH:	487"
TREES REMOVED:	120
TREES RETAINED:	25

TREE NOTE

TREE #414 AND #415 ARE ALREADY LOCATED BEHIND A FENCE.

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DR HORTON

PARKLAND HEIGHTS

TREE RETENTION PLAN

THOMAS P. ABBOTT STATE OF WASHINGTON 56921 REGISTERED PROFESSIONAL ENGINEER

JOB NUMBER:	C21-124
DRAWING NAME:	C21124P-TR-PL
DESIGNER:	TPA
DRAFTING BY:	RCR
DATE:	6-25-21
SCALE:	1"=30'
JURISDICTION:	ISSAQUAH

TR-01

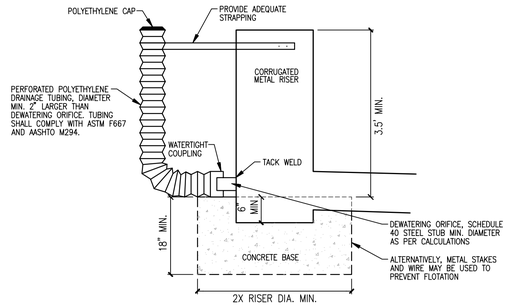
SHEET 3 OF 11

Drawing: P:\Civil\2021\c21-124 mostoon\Drawings\preliminary\C21124P-TR-PL.dwg Plotted: Jun 20, 2022 - 7:17am

A PORTION OF THE N 1/2 OF THE NW 1/4 OF SEC 22, TWN 24 N, RGE 6 E, W.M., KING COUNTY, WASHINGTON

CONSTRUCTION SEQUENCE

1. HOLD THE PRE-CONSTRUCTION MEETING.
2. POST SIGN WITH NAME AND PHONE NUMBER OF CSWPP/ESC SUPERVISOR (MAY BE CONSOLIDATED WITH THE REQUIRED NOTICE OF CONSTRUCTION SIGN).
3. FLAG OR FENCE CLEARING LIMITS.
4. INSTALL CATCH BASIN PROTECTION, IF REQUIRED. INSTALL FLOW CONTROL BMP AREA PROTECTION, IF REQUIRED.
5. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
6. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
7. CONSTRUCT SEDIMENT PONDS.
8. GRADE AND STABILIZE CONSTRUCTION ROADS.
9. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT. CONSTRUCT SWPPS IN ANTICIPATION OF SCHEDULED CONSTRUCTION ACTIVITY (E.G., CONCRETE-RELATED PH MEASURES FOR UTILITY, VAULT OR ROADWAY CONSTRUCTION).
10. MAINTAIN EROSION CONTROL AND SWPPS MEASURES IN ACCORDANCE WITH DEPARTMENT OF ECOLOGY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
11. RELOCATE EROSION CONTROL AND SWPPS MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL AND POLLUTANT PROTECTION IS ALWAYS IN ACCORDANCE WITH THE DEPARTMENT OF ECOLOGY CONSTRUCTION STORMWATER POLLUTION PREVENTION STANDARDS.
12. COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.
13. STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.
14. SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
15. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPS IF APPROPRIATE.



SEDIMENT POND RISER DETAIL
NOT TO SCALE

SCALE: 1" = 30'
30' 0 30' 60'

LEGEND

- CLEARING LIMITS (CLEARING AREA / PROTECTED AREA)
- SILT FENCE
- CONVEYANCE SWALE
- ROCK CONSTRUCTION ENTRANCE
- CATCH BASIN PROTECTION
- PRE DEVELOPMENT DRAINAGE PATTERN
- POST DEVELOPMENT DRAINAGE PATTERN
- INSTALL CHECK DAM EVERY 100' OR 2' OF ELEVATION CHANGE
- 5'x5'x2' RIPRAP PAD
- TREE TO BE RETAINED
- TREE TO BE REMOVED
- TREE PROTECTION FENCING

TESC SEDIMENTATION POND

POND TRIBUTARY AREA	5.03 AC
REQUIRED SURFACE AREA	3,600 SF
TOP AREA (SF)	3,600 SF
DESIGN WATER SURFACE ELEV.	418.00'
TOP OF BERM/POND	418.50
POND BOTTOM ELEV.	414.00'
SIDE SLOPES	3H : 1V
ORIFICE SIZE	2-1/2"ø

DISTURBED AREA

DISTURBED AREA: 231,188 SF (5.30 AC)

DISCLAIMER

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DR HORTON

PARKLAND HEIGHTS

PRELIMINARY TESC PLAN

THOMAS P. ABBOTT — STATE OF WASHINGTON — 56921 — REGISTERED PROFESSIONAL ENGINEER — 6-25-21

JOB NUMBER:	C21-124
DRAWING NAME:	C21124P-ER-PL
DESIGNER:	TPA
DRAFTING BY:	RCR
DATE:	6-25-21
SCALE:	1"=30'
JURISDICTION:	ISSAQUAH

ER-01
SHEET 4 OF 11

Drawing: P:\Civil\2021\c21-124 mattson\Drawings\preliminary\C21124P-ER-PL.dwg Plotted: Jun 20, 2022 - 7:17am

A PORTION OF THE N 1/2 OF THE NW 1/4 OF SEC 22, TWN 24 N, RGE 6 E, W.M., KING COUNTY, WASHINGTON

EROSION PREVENTION AND SEDIMENT CONTROL (TESC) NOTES

1. APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION (SWDM APPENDIX D). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT OF WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT.
5. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, FLOW CONTROL BMP LOCATIONS (EXISTING AND PROPOSED),AND ADJACENT PROPERTIES IS MINIMIZED.
6. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.) AS DIRECTED BY THE CITY OF ISSAQUAH.
7. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.
8. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
9. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.
10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH DURING THE DRY SEASON, BI-MONTHLY DURING THE WET SEASON, OR WITHIN TWENTY FOUR (24) HOURS FOLLOWING A STORM EVENT.
11. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
12. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE ROUGH GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY. FLOW CONTROL BMP AREAS (EXISTING OR PROPOSED) SHALL NOT BE USED AS TEMPORARY FACILITIES AND SHALL BE PROTECTED FROM SEDIMENTATION AND INTRUSION.
13. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE KING COUNTY SURFACE WATER DESIGN MANUAL.
14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE DPER INSPECTOR.

CONSTRUCTION NOTES

1. BEFORE ANY CLEARING OR GRADING OCCURS, MARK CLEARING LIMITS IN A PROMINENT AND DURABLE MANNER. MAINTAIN UNTIL FINAL APPROVAL.
2. BEFORE ANY CLEARING OR GRADING OCCURS INSTALL PROTECTION FOR TREES AND CRITICAL AREAS/BUFFERS.
3. THE CONTRACTOR SHALL RESTORE TO CURRENT STANDARDS CRITICAL AREAS, AND PUBLIC AND PRIVATE PROPERTY DAMAGED BY CONTRACTOR'S OPERATIONS.
4. AT ALL TIMES MAINTAIN ACCESS TO BUILDINGS FOR FIRE, PEDESTRIAN AND VEHICULAR ACCESS.
5. INSTALL STEEL PLATES OVER ANY TRENCH, AT ANY TIME WORK IS STOPPED AND THE TRENCH IS OPEN.

EROSION, SEDIMENTATION AND WATER QUALITY SITE INSPECTIONS:

PRIOR TO ANY SITE DEVELOPMENT WORK TAKING PLACE, A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR, OWNER, AND CITY INSPECTOR SHALL BE HELD.

THE DEPARTMENT OF ECOLOGY REQUIRES THAT CONSTRUCTION PROJECTS ONE ACRE OR LARGER RETAIN A CESCL TO ENSURE THAT THE PROJECT IS IN COMPLIANCE WITH THE CURRENT EROSION, SEDIMENTATION AND WATER QUALITY STANDARDS. NO CESCL IS REQUIRED FOR THIS PROJECT.

THE CESCL IS RESPONSIBLE FOR:

A. INSPECTING THE CONSTRUCTION SITE TO ENSURE THAT ALL CONSTRUCTION SWPPP MEASURES ARE FUNCTIONING AS INTENDED.
B. ALLOCATING RESOURCES TO REPAIR ALL EROSION CONTROL STRUCTURES THAT ARE IN NEED OF MAINTENANCE.
C. MONITORING WATER QUALITY FOR ANY STORM DRAINAGE THAT LEAVES THE SITE.
D. STOPPING AND/OR REDIRECTING CONSTRUCTION ACTIVITIES DEEMED NECESSARY TO PROTECT THE ENVIRONMENT.

SHOULD BMP PERFORMANCE GOALS NOT BE ACHIEVED, THE ONLY CONSTRUCTION ACTIVITIES THAT SHALL BE ALLOWED ARE THE REPAIR OF EXISTING EROSION CONTROL STRUCTURES, INSTALLATION OF ADDITIONAL BMP'S TO MINIMIZE THE TRANSPORT OF SEDIMENT OFFSITE, OR THOSE ACTIVITIES THAT DO NOT DISTURB EXPOSED EARTH AND DO NOT HAVE THE POTENTIAL TO GENERATE ADDITIONAL SEDIMENT.

DE-WATERING CONTROL NOTES

ALL TURBID DE-WATERING WATER SHALL BE DISPOSED OF USING ONE OF THE FOLLOWING OPTIONS:

1. INFILTRATION,
2. TRANSPORT OFFSITE IN A VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS,
3. ECOLOGY-APPROVED ON-SITE CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES,
4. SANITARY SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, IF THERE IS NO OTHER OPTION,
5. USE OF A SEDIMENTATION BAG WITH OUTFALL TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DE-WATERING, OR
6. FOUNDATION, VAULT, AND TRENCH DE-WATERING WATER, WHICH HAVE SIMILAR CHARACTERISTICS TO STORMWATER RUNOFF AT THE SITE, SHALL BE DISPERSED TO NATIVE VEGETATION AND/ OR DISCHARGED TO A SEDIMENTATION FACILITY.

POLLUTANT CONTROL NOTES

1. ALL POLLUTANTS, INCLUDING WASTE MATERIALS, THAT OCCUR ONSITE SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.
2. COVER, CONTAINMENT, AND PROTECTION FROM VANDALISM SHALL BE PROVIDED FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND NON-INERT WASTES PRESENT ON THE SITE (SEE CHAPTER 173-304 WAC FOR THE DEFINITION OF INERT WASTE). ONSITE FUELING TANKS SHALL INCLUDE SECONDARY CONTAINMENT.
3. MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, SOLVENT AND DE-GREASING CLEANING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER RUNOFF MUST BE CONDUCTED USING SPILL PREVENTION MEASURES, SUCH AS DRIP PANS. CONTAMINATED SURFACES SHALL BE CLEANED IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT. EMERGENCY REPAIRS MAY BE PERFORMED ONSITE USING TEMPORARY PLASTIC PLACED BENEATH AND, IF RAINING, OVER THE VEHICLE.
4. APPLICATION OF AGRICULTURAL CHEMICALS, INCLUDING FERTILIZERS AND PESTICIDES, SHALL BE CONDUCTED IN A MANNER AND AT APPLICATION RATES THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO STORMWATER RUNOFF. MANUFACTURERS' RECOMMENDATIONS FOR APPLICATION RATES AND PROCEDURES SHALL BE FOLLOWED.
5. MEASURES SHALL BE USED TO PREVENT OR TREAT CONTAMINATION OF STORMWATER RUNOFF BY PH MODIFYING SOURCES. THESE SOURCES INCLUDE, BUT ARE NOT LIMITED TO, BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHING AND CURING WATERS, WASTE STREAMS GENERATED FROM CONCRETE GRINDING AND SAWING, EXPOSED AGGREGATE PROCESSES, AND CONCRETE PUMPING AND MIXER WASHOUT WATERS. STORMWATER DISCHARGES SHALL NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE WATER QUALITY STANDARD FOR PH IN THE RECEIVING WATER.

THE THIRTEEN ELEMENTS OF A CONSTRUCTION SWPPP:

THE BMPS REFERENCED BELOW ARE PER THE 2014 STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON:

1. MARK CLEARING LIMITS: THE CLEARING LIMITS ARE INDICATED ON THE PLAN SHEET. CLEARING AND GRADING WILL BE LIMITED TO ONLY AREAS THAT NEED TO BE DISTURBED FOR GRADING, AND PLACING OR STOCK PILING FILL AND TO PRESERVE AS MUCH NATURAL VEGETATION AND THE DUFF LAYER AS POSSIBLE. FIELD MARKING THE CLEARING LIMITS SHALL BE COMPLETED PRIOR TO ANY CLEARING OR DISTURBING THE SITE.
   BMPS:
   C103 PLASTIC OR METAL FENCE
   C233 SILT FENCE
2. ESTABLISH CONSTRUCTION ACCESS: ACCESS TO THE CONSTRUCTION SITE SHALL BE LIMITED TO THE ROCK CONSTRUCTION ENTRANCES.
   BMPS:
   C105 STABILIZED CONSTRUCTION ENTRANCE
3. CONTROL FLOW RATES: A TEMPORARY SEDIMENT POND AND ASSOCIATED CONTROL STRUCTURE WILL BE USED TO CONTROL FLOW RATES. SEDIMENT-LADEN RUNOFF WILL BE DIRECTED TO POND.
   BMPS:
   C241 TEMPORARY SEDIMENT POND
4. INSTALL SEDIMENT CONTROLS: SEDIMENT CONTROL WILL BE PROVIDED THROUGH A COMBINATION OF SILT FENCE, AND THE TEMPORARY DETENTION/ WATER QUALITY POND.
   BMPS:
   C200 INTERCEPTOR DIKE AND SWALES
   C233 SILT FENCE
   C241 TEMPORARY SEDIMENT POND
5. STABILIZE SOILS: TEMPORARY AND PERMANENT SOIL STABILIZATION WILL BE PROVIDED. TEMPORARY STABILIZATION WILL BE PROVIDED TO EXPOSED WORKED EARTH. FROM OCTOBER 1 UNTIL APRIL 30, NO EXPOSED SOIL MAY REMAIN EXPOSED AND UNWORKED FOR MORE THAN TWO DAYS; FROM MAY 1 UNTIL SEPTEMBER 30, NO EXPOSED SOIL MAY REMAIN EXPOSED AND UNWORKED FOR MORE THAN SEVEN DAYS.
   BMPS:
   C120 TEMPORARY AND PERMANENT SEEDING
   C121 MULCHING
   C123 PLASTIC COVERING
6. PROTECT SLOPES: SLOPES SHALL BE PROTECTED FROM EROSION THROUGH COVER AND SOIL STABILIZATION.
   BMPS:
   C120 TEMPORARY AND PERMANENT SEEDING
   C121 MULCHING
   C123 PLASTIC COVERING
7. PROTECT DRAIN INLETS: INLET PROTECTION SHALL BE INSTALLED IN ALL CATCH BASINS AND REMAIN UNTIL CONSTRUCTION OF ALL THE RESIDENCES WITHIN THE DEVELOPMENT HAS BEEN COMPLETED. INLET PROTECTION SHALL BE INSPECTED REGULARLY AND THE FILTER FABRIC CLEANED/REPLACED AS NECESSARY. WHEN PROVIDING MAINTENANCE TO THE INLET PROTECTION, THE FABRIC SHALL BE REMOVED IN SUCH A WAY AS TO NOT ALLOW THE RETAINED SEDIMENT TO FALL INTO THE CATCH BASIN.
   BMPS:
   C220 STORM DRAIN INLET PROTECTION
8. STABILIZE CHANNELS AND OUTLETS: ALL CHANNEL SLOPES SHALL BE CONSTRUCTED AND PROTECTED AGAINST EROSION.
   BMPS:
   C207 CHECK DAMS
9. CONTROL POLLUTANTS: POLLUTANTS SHALL BE CONTROLLED PER POLLUTANT CONTROL NOTES. SEE THIS SHEET FOR NOTES.
10. CONTROL DE-WATERING: DISPOSAL OPTIONS FOR DE-WATERING WATER ARE AS SPECIFIED IN THE DE-WATERING CONTROL NOTES. SEE THIS SHEET FOR NOTES.
11. MAINTAIN BMPS: MAINTENANCE OF THE BMPS IS SPECIFIED IN THE CONSTRUCTION SEQUENCE AND GRADING AND EROSION CONTROL NOTES, SEE SHEET ER-01 AND THIS SHEET.
12. PROJECT MANAGEMENT: THE GRADING AND EROSION CONTROL NOTES SPECIFY SEASONAL WORK LIMITATIONS. BMPS SHALL BE MAINTAINED PER ELEMENT #11.
13. PROTECT LID BMP'S: LOW IMPACT DEVELOPMENT (LID) BMP'S WILL NOT BE USED IN THIS PROJECT.

SEED OPTIONS MIX

TABLE 4.1 REPRESENTS THE STANDARD MIX FOR THOSE AREAS WHERE JUST A TEMPORARY VEGETATIVE COVER IS REQUIRED.

TABLE 4.1
TEMPORARY EROSION CONTROL SEED MIX

	% WEIGHT	% PURITY	% GERMINATION
CHEWINGS OR ANNUAL BLUE GRASS FESTUCA RUBRA VAR. COMMUTATA OR POA ANNA	40	98	90
PERENNIAL RYE LOLIUM PERENNE	40	98	90
REDTOP OR COLONIAL BENTGRASS AGROSTIS ALBA OR AGROSTIS TENUIS	10	92	85
WHITE DUTCH CLOVER TRIFOLIUM REPENS	10	98	90

THIS TURF SEED MIX IN TABLE 4.3 IS FOR DRY SITUATIONS WHERE THERE IS NO NEED FOR MUCH WATER. THE ADVANTAGE IS THAT THIS MIX REQUIRES VERY LITTLE MAINTENANCE.

TABLE 4.3
LOW-GROWING TURF SEED MIX

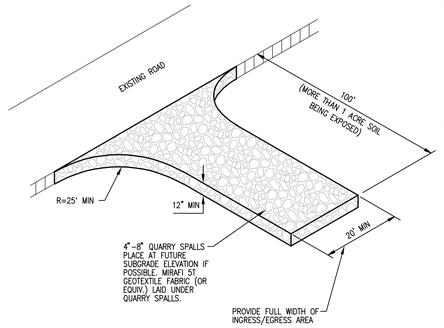
	% WEIGHT	% PURITY	% GERMINATION
DWARF TALL FESCUE (SEVERAL VARIETIES) FESTUCA ARUNDINACEA VAR.	45	98	90
DWARF PERENNIAL RYE (BARCLAY) LOLIUM PERENNE VAR. BARELAY	30	98	90
RED FESCUE FESTUCA RUBRA	20	98	90
COLONIAL BENTGRASS AGROSTIS TENUIS	5	98	90

TABLE 4.4 PRESENTS A MIX RECOMMENDED FOR BIOSWALES AND OTHER INTERMITTENTLY WET AREAS.

TABLE 4.4
BIOSWALE SEED MIX*

	% WEIGHT	% PURITY	% GERMINATION
TALL OR MEADOW FESCUE FESTUCA ARUNDINACEA OR FESTICA ELATIOR	75-80	98	90
SEASIDE/CREEPING BENTGRASS AGROSTIS PALUSTRIS	10-15	92	85
REDTOP BENTGRASS AGROSTIS ALBA OR AGROSTIS GIGANTEA	5-10	90	80

*MODIFIED BRIARGREEN, INC. HYDROSEEDING GUIDE WETLAND SEED MIX



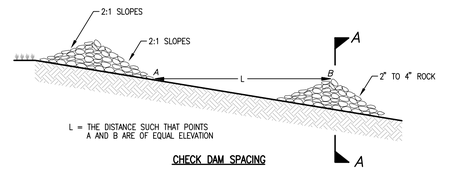
ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE:

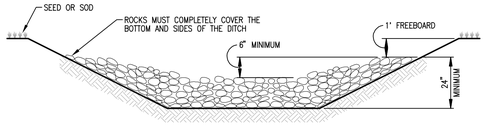
1. INSTALLATION: THE AREA OF THE ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL. THE GRAVEL SHALL BE PLACED TO THE SPECIFIED DIMENSIONS. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHOULD BE CONSTRUCTED ACCORDING TO SPECIFICATIONS IN THE PLAN. IF WASH RACKS ARE USED, THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURER' S SPECIFICATIONS.
2. AGGREGATE: 4" TO 6" CRUSHED BALLAST ROCK.
3. ENTRANCE DIMENSIONS: THE AGGREGATE LAYER MUST BE AT LEAST 6 INCHES THICK. IT MUST EXTEND THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF THE ENTRANCE MUST BE AT LEAST 100 FEET.
4. WASHING: IF CONDITIONS ON THE SITE ARE SUCH THAT MOST OF THE MUD IS NOT REMOVED FROM VEHICLE TIRES BY CONTACT WITH HE GRAVEL, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER A PUBLIC ROAD. WASH WATER MUST BE CARRIED AWAY FROM THE ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.
5. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAY OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

MAINTENANCE STANDARDS:

1. QUARRY SPALLS (OR HOG FUEL) SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED, IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK, AND WASH WATER SHALL DRAIN TO A SEDIMENT TRAP OR POND. PROVIDE TIRE WASH FOR ALL WINTER GRADING.
3. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON-SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, THE CONSTRUCTION OF A SMALL SUMP SHALL BE CONSIDERED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP.
4. ANY ROCK SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY.
5. IF VEHICLES ARE ENTERING OR EXITING THE SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING (SECTION 5.4.1) SHALL BE INSTALLED TO CONTROL TRAFFIC.



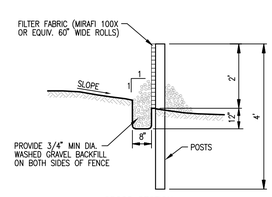
CHECK DAM SPACING



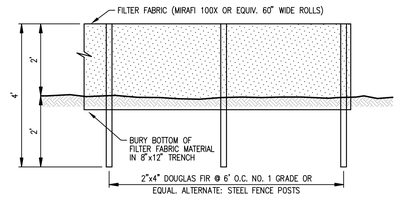
SECTION AA

NOTES:
1. PROVIDE ROCK CHECK DAMS EVERY 100 FT. OR EVERY 2 FT. OF VERTICAL FALL.
2. ANY SEDIMENT DEPOSITION OF MORE THAN 0.5 FT. IN DEPTH SHALL BE REMOVED SO THAT THE CHANNEL IS RESTORED TO ITS ORIGINAL DESIGN CAPACITY.
3. THE CHANNEL SHALL BE EXAMINED FOR SIGNS OF SCOURING AND EROSION OF THE BED AND BANKS. IF SCOURING OR EROSION HAS OCCURRED, AFFECTED AREAS SHALL BE PROTECTED BY RIP-RAP OR AN EROSION CONTROL BLANKET OR NET.
4. SUMP SHOULD BE PROVIDED IMMEDIATELY UPSTREAM OF CHECK DAM FOR OPTIMUM EFFECTIVENESS.

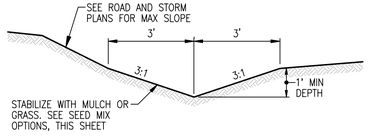
ROCK CHECK DAM
NOT TO SCALE



CROSS SECTION



SILT FENCE DETAIL
NOT TO SCALE



TEMPORARY INTERCEPTOR SWALE DETAIL
NOT TO SCALE

UTILITY NOTE

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

DISCLAIMER

THE TOPOGRAPHIC SURVEY WAS PERFORMED BY LDC, INC. IN MAY 2021. ANY CHANGES TO THE SITE AFTER THIS DATE WILL NOT BE REFLECTED IN THE PLANS. ANY DISCREPANCIES FOUND BETWEEN WHAT IS SHOWN ON THE PLANS AND WHAT IS NOTED IN THE FIELD SHOULD BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.

Call 2 Business Days Before You Dig
811 or 1-800-424-5555
Utilities Underground Location Center

REVISIONS

NO.	DATE	DESCRIPTION	BY

LDC
Surveying
Engineering
Planning
Kent
Woodinville
Olympia
20210 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869
www.LDCorp.com
F 425.482.2893

DR HORTON

PARKLAND HEIGHTS

PRELIMINARY TESC NOTES AND DETAILS

THOMAS P. ABBOTT — STATE OF WASHINGTON — 56921 — REGISTERED PROFESSIONAL ENGINEER — 6-25-21

JOB NUMBER:	C21-124
DRAWING NAME:	C21124P-ER-01
DESIGNER:	TPA
DRAFTING BY:	RCR
DATE:	6-25-21
SCALE:	AS NOTED
JURISDICTION:	ISSAQUAH

ER-02

SHEET 5 OF 11

Drawing: P:\Civil\2021\c21-124 mapleton\Drawings\preliminary\C21124P-ER-01.dwg Plotted: Jun 20, 2022 - 7:17am

A PORTION OF THE N 1/2 OF THE NW 1/4 OF SEC 22, TWN 24 N, RGE 6 E, W.M., KING COUNTY, WASHINGTON

SCALE: 1" = 30'
30' 0 30' 60'

LEGEND

- STORM PIPE
- SEWER PIPE
- WATER PIPE
- LOCK N LOAD RETAINING WALL
- ROCKERY RETAINING WALL

SITE AREA CALCULATIONS

GROSS SITE AREA =	232,555 SF
ROW DEDICATION AREA =	13,795 SF
GROSS – ROW DEDICATION = NET AREA =	218,760 SF
REQUIRED COMMON USABLE OPEN SPACE (15% NET AREA) =	32,814 SF
PROVIDED OPEN SPACE (TRACT 994 AND TRACT 995) =	39,640 SF

NOTES

1. FOR FRONTAGE ROCKERY WALL DETAIL, SEE SHEET RD-05.

STORMWATER DETENTION VAULT DESIGN DETAILS

LIVE STORAGE FOOTPRINTS:	6,800 SF
BEGIN LINE STORAGE ELEVATION:	399.50
TOP OF RISER ELEVATION:	413.50
RISER HEIGHT:	14'
TOP OUTSIDE OF VAULT ELEVATION:	415.00

DISCLAIMER

THE TOPOGRAPHIC SURVEY WAS PERFORMED BY LDC, INC. IN MAY 2021. ANY CHANGES TO THE SITE AFTER THIS DATE WILL NOT BE REFLECTED IN THE PLANS. ANY DISCREPANCIES FOUND BETWEEN WHAT IS SHOWN ON THE PLANS AND WHAT IS NOTED IN THE FIELD SHOULD BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.

UTILITY NOTE

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

Call 2 Business Days Before You Dig
811 or 1-800-424-5555
Utilities Underground Location Center

REVISIONS

NO.	DATE	DESCRIPTION	BY

LDC | Surveying Engineering Planning
Kent | Olympia
20210 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869 | www.LDCorp.com | F 425.482.2893

DR HORTON

PARKLAND HEIGHTS

PRELIMINARY SITE PLAN

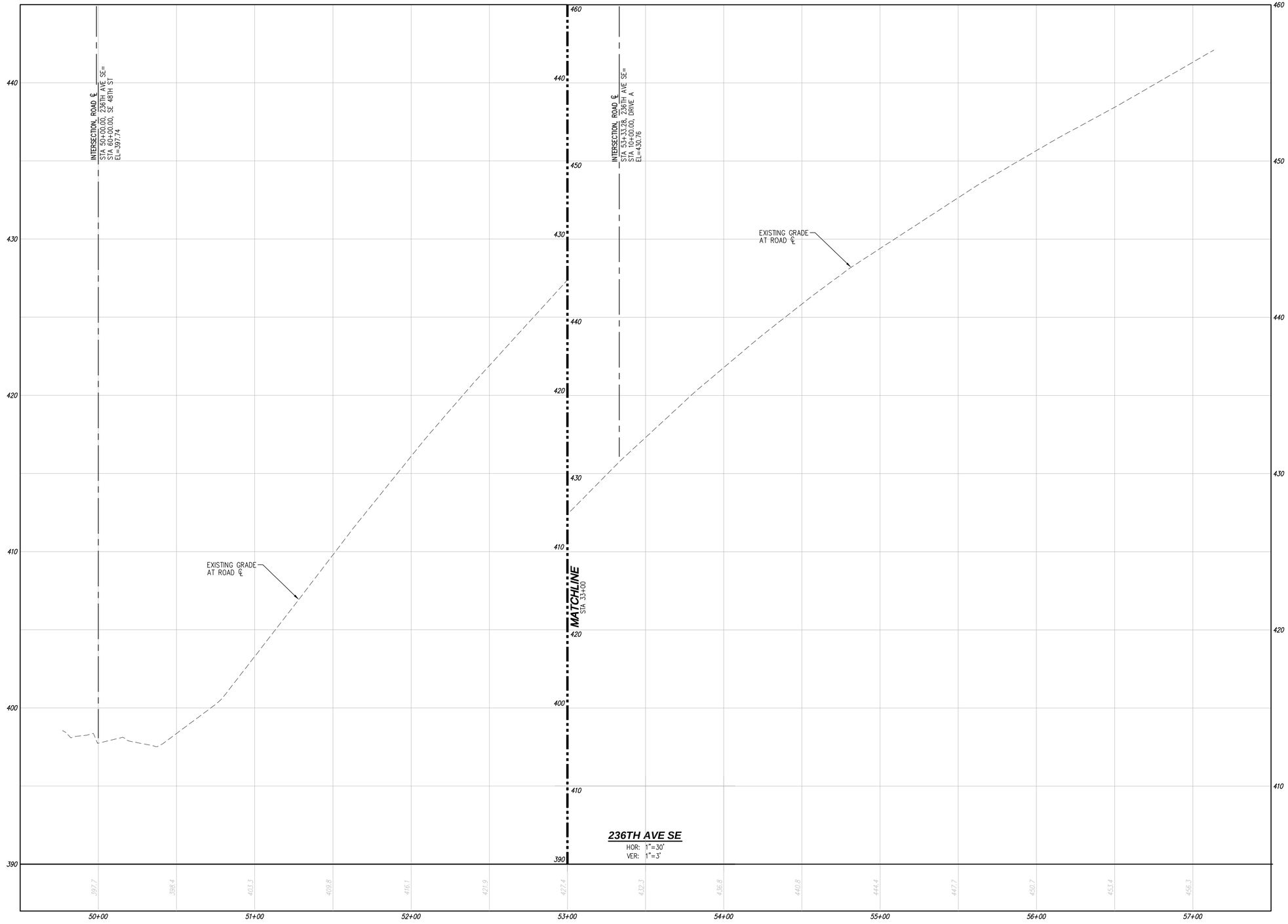
THOMAS P. ABBOTT — STATE OF WASHINGTON — 56921 — REGISTERED PROFESSIONAL ENGINEER — 6-24-21

JOB NUMBER:	C21-124
DRAWING NAME:	C21124P-SP-PL
DESIGNER:	TPA
DRAFTING BY:	RCR
DATE:	6-25-21
SCALE:	1"=30'
JURISDICTION:	ISSAQUAH

SP-01
SHEET 6 OF 11

Drawing: P:\Civil\2021\c21-124 maclean\Drawings\preliminary\C21124P-SP-PL.dwg Plotted: Jun 20, 2022 - 7:18am

A PORTION OF THE N 1/2 OF THE NW 1/4 OF SEC 22, TWN 24 N, RGE 6 E, W.M., KING COUNTY, WASHINGTON



UTILITY NOTE

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DISCLAIMER

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Call 2 Business Days Before You Dig
811 or 1-800-424-5555
Utilities Underground Location Center

REVISIONS

NO.	DATE	DESCRIPTION	BY

LDC | Surveying Engineering Planning
Kent | Olympia
Woodinville
20210 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869 | F 425.482.2893
www.LDCorp.com

DR HORTON

PARKLAND HEIGHTS

PRELIMINARY ROAD PROFILES

THOMAS P. ABBOTT
STATE OF WASHINGTON
56921
REGISTERED
PROFESSIONAL ENGINEER
6-25-21

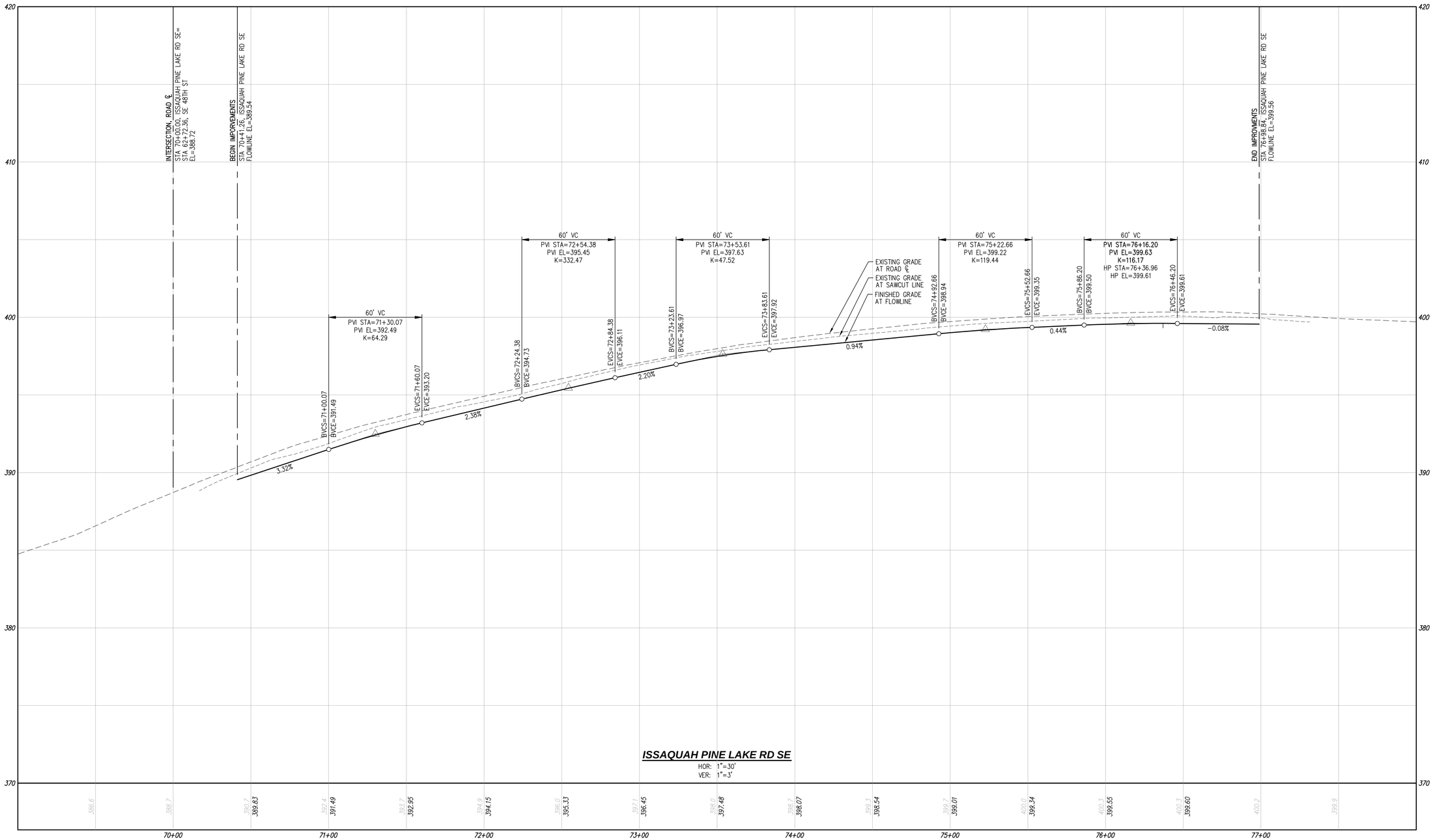
JOB NUMBER:	C21-124
DRAWING NAME:	C21124P-RD-PR
DESIGNER:	TPA
DRAFTING BY:	RCR
DATE:	6-25-21
SCALE:	1"=30'
JURISDICTION:	ISSAQUAH

RD-01

SHEET 7 OF 11

Drawing: P:\Civil\2021\c21-124 masters\Drawings\preliminary\C21124P-RD-PR.dwg Plotted: Jun 20, 2022 - 7:18am

A PORTION OF THE N 1/2 OF THE NW 1/4 OF SEC 22, TWN 24 N, RGE 6 E, W.M., KING COUNTY, WASHINGTON



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THOMAS P. ABBOTT
STATE OF WASHINGTON
56921
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PROFESSIONAL ENGINEER
7-26-21

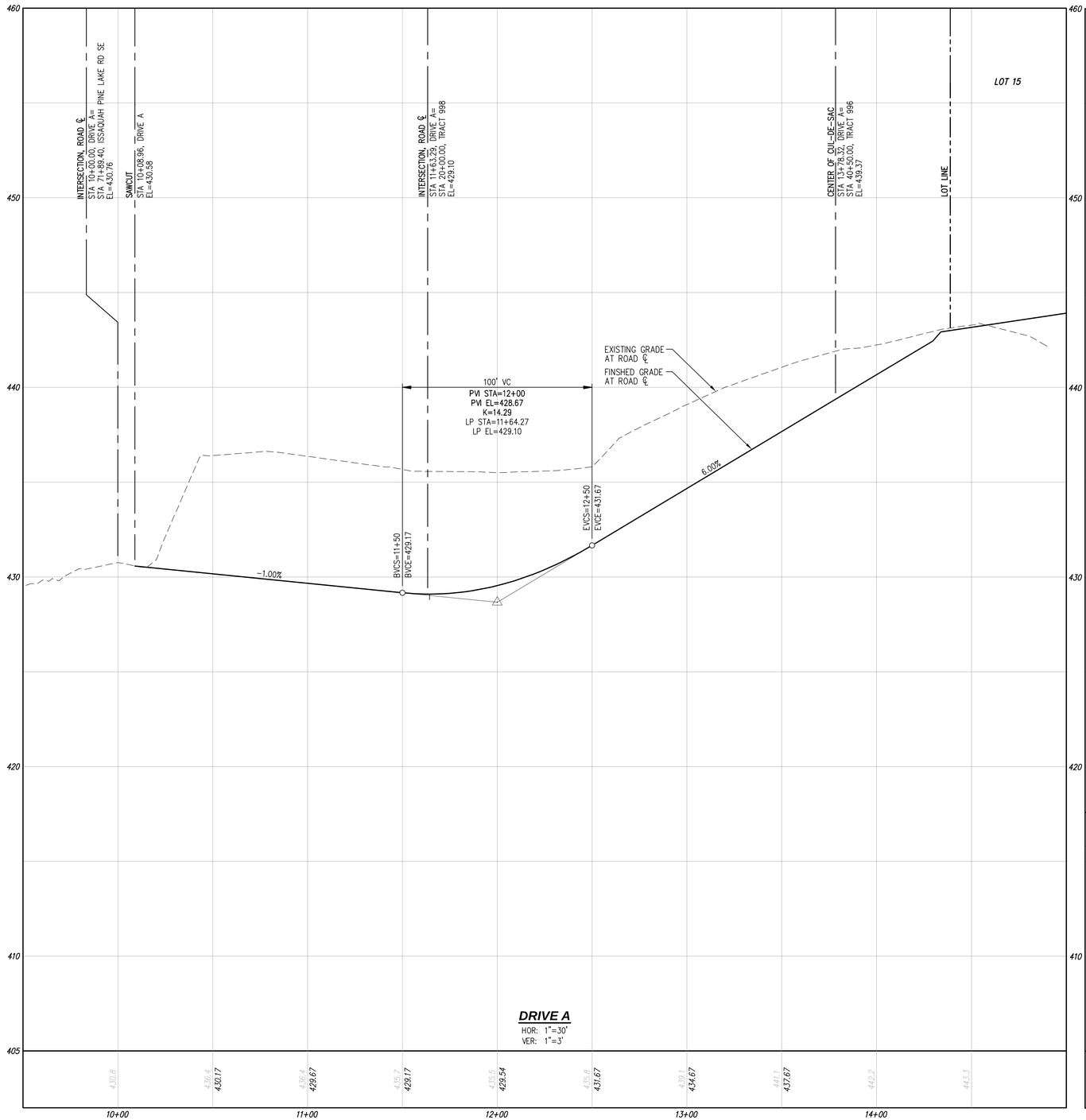
JOB NUMBER:	C21-124
DRAWING NAME:	C21124P-RD-PR
DESIGNER:	TPA
DRAFTING BY:	RCR
DATE:	6-25-21
SCALE:	1"=30'
JURISDICTION:	ISSAQUAH

RD-02

SHEET 8 OF 11

Drawing: P:\Civil\2021\c21-124 mapleson\Drawings\preliminary\C21124P-RD-PR.dwg Plotted: Jun 20, 2022 - 7:18am

A PORTION OF THE N 1/2 OF THE NW 1/4 OF SEC 22, TWN 24 N, RGE 6 E, W.M., KING COUNTY, WASHINGTON



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JURISDICTION:	ISSAQUAH

RD-03

SHEET 9 OF 11

Drawing: P:\Civil\2021\c21-124 maplesn\Drawings\preliminary\C21124P-RD-PR.dwg Plotted: Jun 20, 2022 - 7:18am

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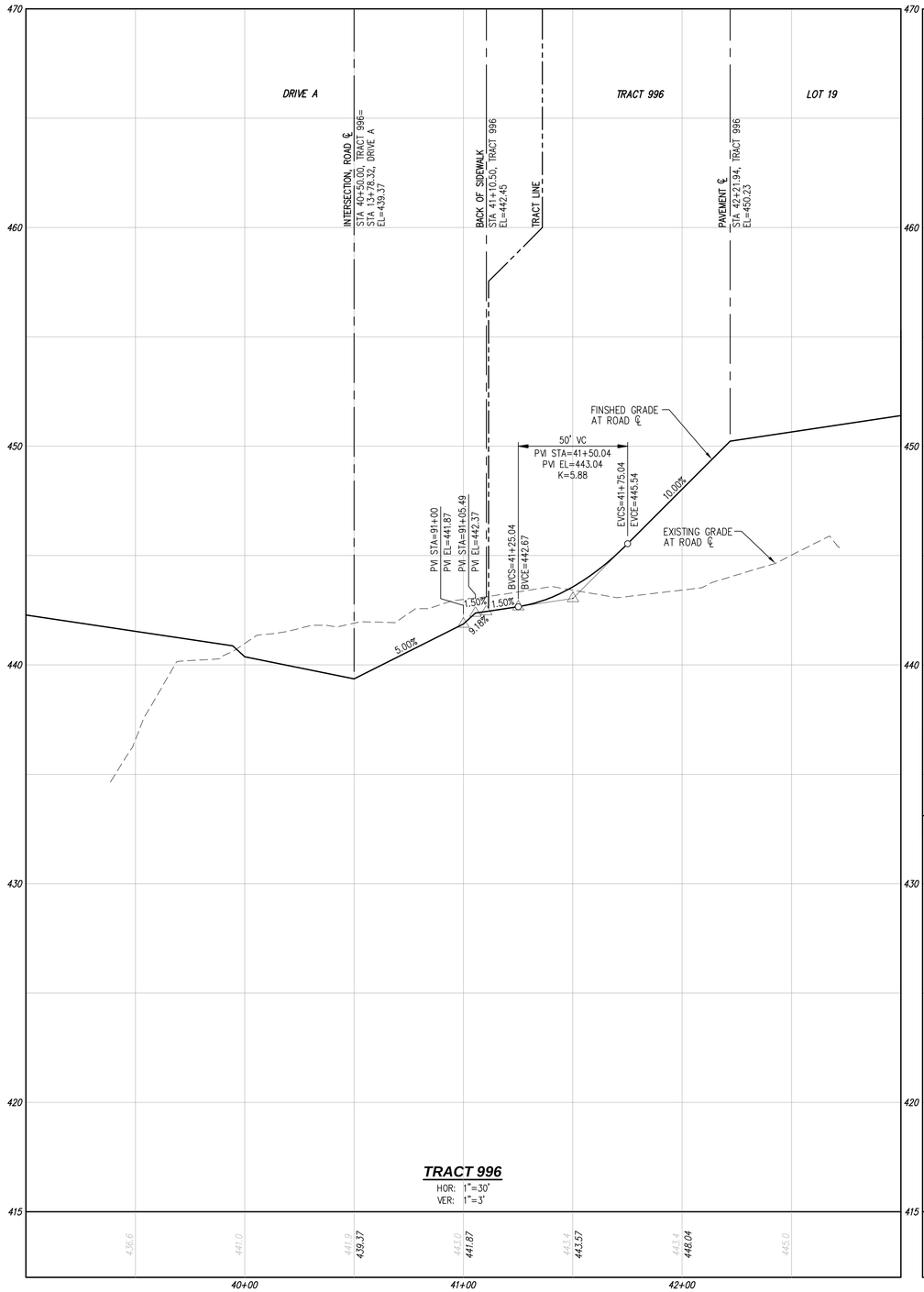

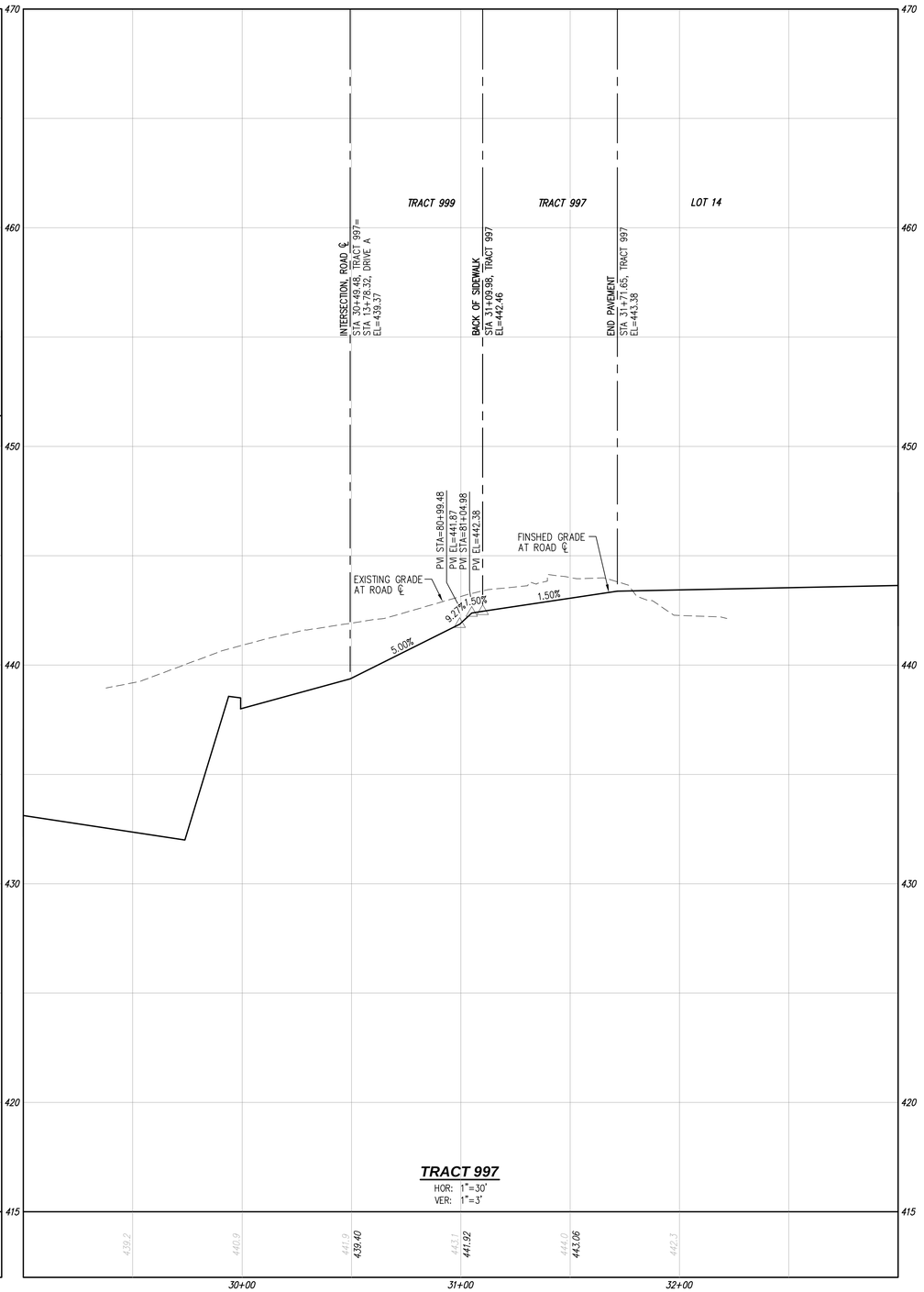

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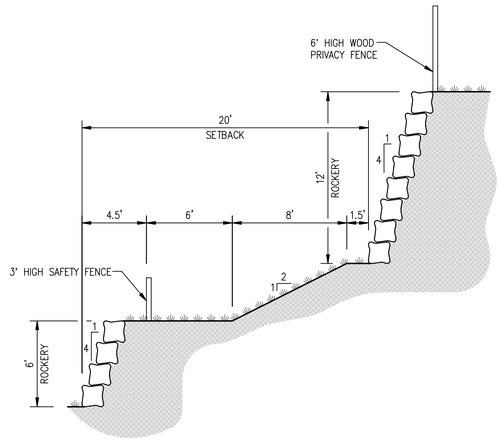
RD-04

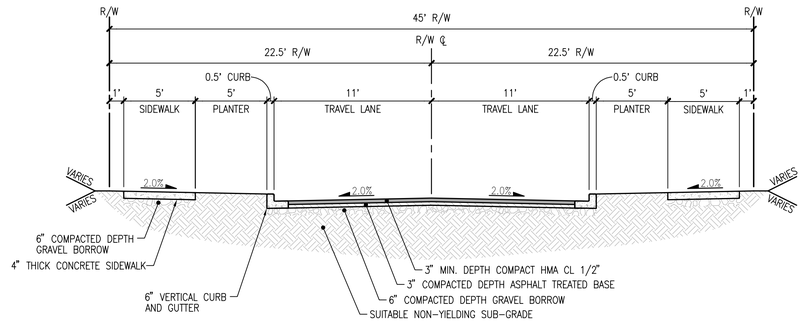
SHEET 10 OF 11

Drawing: P:\Civil\2021\c21-124 mcallcon\Drawing\preliminary\C21124P-RD-PR.dwg Plotted: Jun 20, 2022 - 7:18am



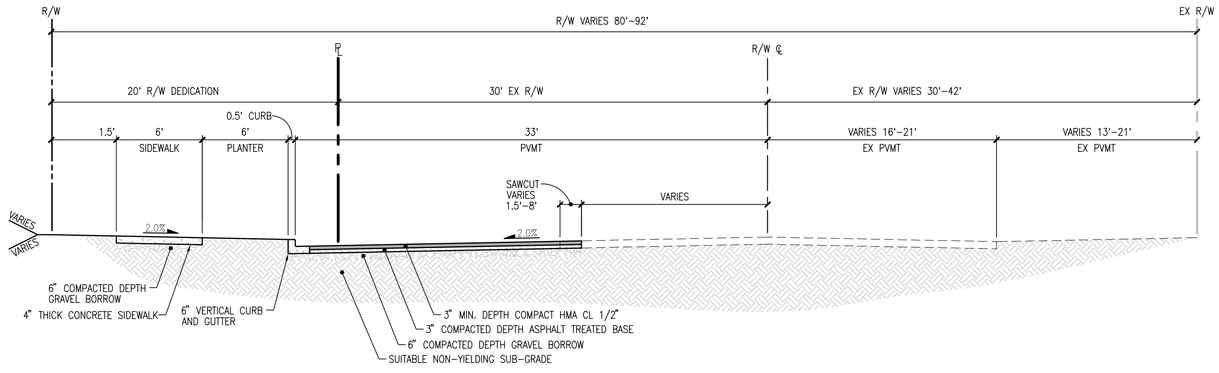
ISSAQUAH-PINE LAKE ROAD FRONTAGE ROCKERY WALL DETAIL

SCALE: 1"=5'



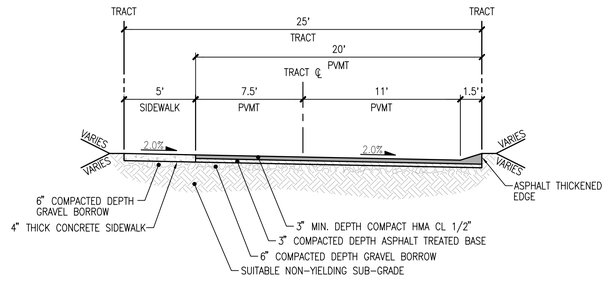
INTERNAL PRIVATE ROAD TYPICAL SECTION

SCALE: 1"=5'



ISSAQUAH PINE LAKE RD SE TYPICAL SECTION

SCALE: 1"=5'



TRACT TYPICAL SECTION

SCALE: 1"=5'

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PARKLAND HEIGHTS

PRELIMINARY ROAD SECTIONS

THOMAS P. ABBOTT
STATE OF WASHINGTON
56921
REGISTERED
PROFESSIONAL ENGINEER
6-10-21

JOB NUMBER:	C21-124
DRAWING NAME:	C21124P-RD-PR
DESIGNER:	TPA
DRAFTING BY:	RCR
DATE:	6-25-21
SCALE:	1"=5'
JURISDICTION:	ISSAQUAH

RD-05

SHEET 11 OF 11

Drawing: P:\Civil\2021\c21-124 madison\Drawings\preliminary\C21124P-RD-PR.dwg Plotted: Jun 20, 2022 - 7:18am

PLANT SCHEDULE

EVERGREEN TREES	BOTANICAL / COMMON NAME	SIZE	QTY
	Abies grandis / Grand Fir	6' Ht. min.	4
	Calocedrus decurrens / Incense Cedar	6' Ht. min.	11
	Thuja plicata 'Excelsa' / Western Red Cedar	6' Ht. min.	12
	Tsuga mertensiana / Mountain Hemlock	6' Ht. min.	9

STREET TREE	BOTANICAL / COMMON NAME	SIZE	QTY
	Nyssa sylvatica / Tupelo Full and Matching. 'Medium' street. Install 30' on-center	2" Cal. 10' Ht. min.	19

DECIDUOUS TREES	BOTANICAL / COMMON NAME	SIZE	QTY
	Acer circinatum / Vine Maple	1.5" Cal, 6' Ht. min.	14

EXTENSIVE EXISTING VEGETATION TO REMAIN. NO STREET TREES PROPOSED

EXISTING TREE TO BE RETAINED, TYPICAL. SEE CIVIL SET FOR TREE RETENTION PLAN

SEE SHEET L-2 FOR ENLARGED OPEN SPACE LANDSCAPE PLAN

EXISTING STREET TREE TO BE RETAINED, TYPICAL

TREE PLAN
SCALE: 1" = 30' - 0"

GRAPHIC SCALE
-30 0 15 30 60
(IN FEET)
1 inch = 30 feet

Created: 7/28/20
1. 7/27/22 REVISED
2. 6/21/22 REVISED
Drawn: JMV
CHK'D: JMV
JMV

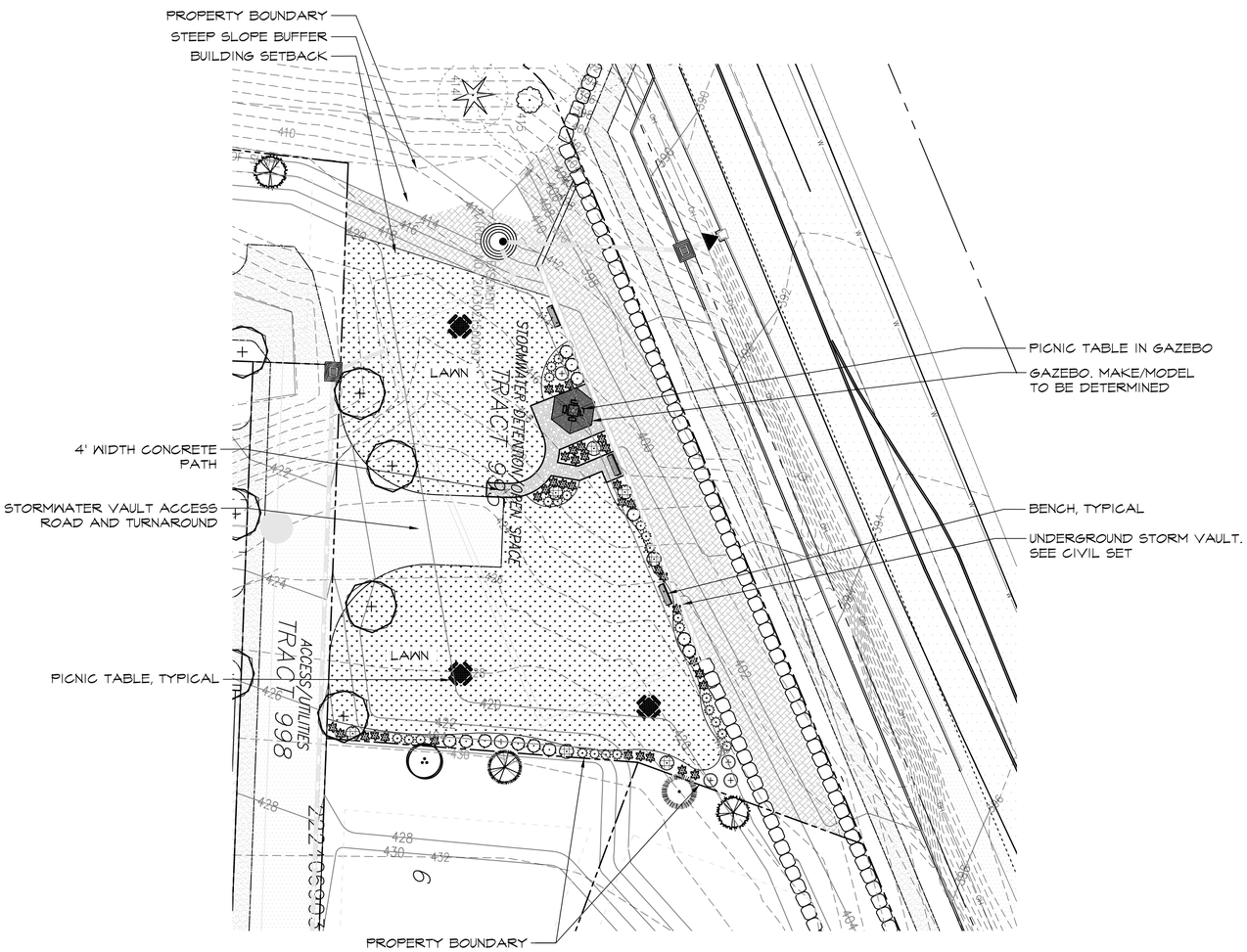
CRAMER DESIGN CONSULTANTS, INC.
LANDSCAPE ARCHITECT
1909 242ND STREET SE
BOTHELL, WA 98021
425-241-6258

STATE OF WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT
DOYLE L. CRAMER
CERTIFICATE NO. 634

MCLEAN SUBDIVISION
236th AVENUE SE, ISSAQUAH

TREE PLAN

SHEET
L-1
OF 3 SHEETS



LANDSCAPE PLAN
SCALE: 1" = 20' - 0"

GRAPHIC SCALE
-20 0 10 20 40
(IN FEET)
1 inch = 20 feet

SE-5340

SKU: SE-5340
Category: Tables

PACIFIC OUTDOOR PICNIC TABLE

Contemporary 6' coutour bench with powder coated 2"x2" welded steel frame and 3"x4" steel coutour seat back. Comes in 3"x4" recycled plastic seat and back.

PACIFIC OUTDOOR BENCH SE-5130

PLANT SCHEDULE

SHRUBS	BOTANICAL / COMMON NAME	SIZE		QTY
	Mahonia aquifolium / Oregon Grape	1 gal		12
	Mahonia nervosa / Oregon Grape	1 gal		23
	Polystichum munitum / Western Sword Fern	1 gal		35
	Rhododendron var. / Rhododendron	1 gal		5
	Ribes sanguineum / Red Flowering Currant	1 gal		7
GROUND COVERS	**BOTANICAL / COMMON NAME**	**SIZE**	**SPACING**	**QTY**
	Arctostaphylos uva-ursi / Kinnikinnick	1 gal	36" o.c.	432
SITE	**BOTANICAL / COMMON NAME**	**SIZE**	**SPACING**	**QTY**
	Concrete	N/A		443 sf
SOD/SEED	**BOTANICAL / COMMON NAME**	**SIZE**	**SPACING**	**QTY**
	Lawn	sod		12,701 sf

Drawn: JMV
Checked: JMV
1. 7/22/22 REVISED
2. 6/21/22 REVISED

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LANDSCAPE ARCHITECT
1909 242ND STREET SE
BOTHELL, WA 98021
425-241-6258

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LANDSCAPE ARCHITECT
DOYLE L. CRAMER
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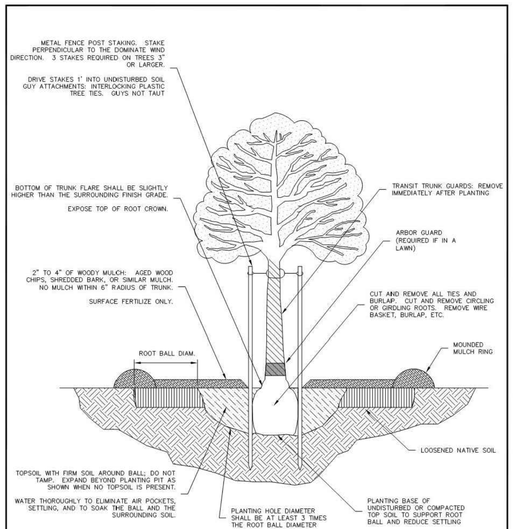
MCLEAN SUBDIVISION
236th AVENUE SE, ISSAQUAH
LANDSCAPE PLAN

SHEET
L-2
OF 3 SHEETS



APPROVED	DEPT.	DATE

NOTES:
1. TREE LOCATION TO BE VERIFIED NOT TO CONFLICT WITH UNDERGROUND UTILITIES A MIN. OF 3 FT CLEAR ZONE EACH SIDE.

NO SCALE

CITY OF ISSAQUAH PUBLIC WORKS DEPARTMENT APRIL 2010

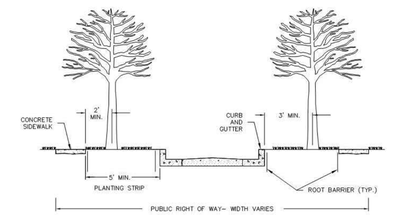
Back to Table of Contents

TREE PLANTING DETAIL

NOTE: THE ORIGINAL IS APPROVED FOR PUBLICATION BY PARKS DEPARTMENT AND FILED AT THE CITY OF ISSAQUAH PUBLIC WORKS ENGINEERING OFFICE.

STANDARD DETAIL NO. L-01

REVs



NOTES:
1. TREE SPACING IS DEPENDANT ON THE SIZE AND TYPE OF STREET TREE USED. SEE CONTRACT FOR SPACING.
2. TREES SHALL NOT BE PLACED IN SIGHT DISTANCE TRIANGLES PER MOST CURRENT VERSION OF AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) OR CITY STANDARDS.
3. COORDINATE WITH TRAFFIC SIGNAL ENGINEER SO THAT TREES DO NOT OBSTRUCT OPERATIONS OF TRAFFIC SIGNAL SYSTEMS.
4. PLANTING STRIP IRRIGATION SYSTEMS SHALL MEET IRRIGATION STANDARD AND INCORPORATE LATEST WATER CONSERVATION TECHNIQUES.
5. STREET TREES SHALL HAVE A MINIMUM OVERHEAD CLEARANCE OF SEVEN (7) FEET OVER PEDESTRIAN PATHWAYS AND FOURTEEN (14) FEET OVER STREETS. STREET TREES SHALL BE CENTERED A MINIMUM OF THIRTY (30) FEET FROM INTERSECTIONS; TWENTY (20) FEET FROM STREET LIGHTS; THREE (3) FEET FROM CURBS AND TWO (2) FEET FROM SIDEWALKS OR AS OTHERWISE APPROVED BY THE CITY.
6. STREET TREES SHALL BE PLANTED IN A PLANTING STRIP WITH A MINIMUM OF FIVE (5) FEET BETWEEN THE SIDEWALK AND THE BACK OF THE CURB
7. TREE PIT AREA SHALL BE A MINIMUM OF 24 SQUARE FEET.
8. ROOT BARRIER SHALL EXTEND A MINIMUM OF 5 FEET BEYOND TREE (REFER TO MANUFACTURERS DETAIL).

APPROVED	DEPT.	DATE

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NO SCALE

CITY OF ISSAQUAH PUBLIC WORKS DEPARTMENT APRIL 2010

TYPICAL STREET TREE LOCATION REQUIREMENTS

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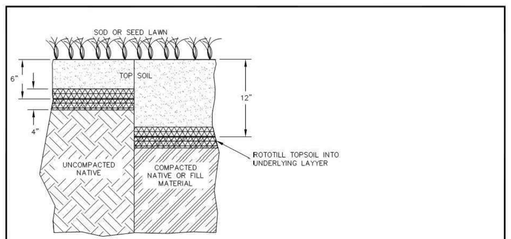
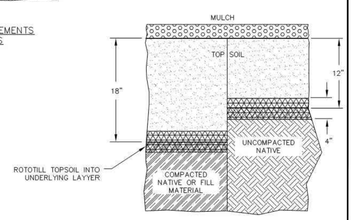
STANDARD DETAIL NO. L-03

REV:



TOP SOIL REQUIREMENTS FOR LAWNS



TOP SOIL REQUIREMENTS FOR TREE AND SHRUB BEDS

APPROVED	DEPT.	DATE

NOTES:
1) ALL PLANT MATERIALS TO MEET THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z80.1-1900 OR MOST CURRENT VERSION.
2) PLANT, MAINTAIN AND WARRANTY AS PER SPECIAL PROVISIONS.
3) DO NOT SUBSTITUE SPECIES WITHOUT ENGINEER APPROVAL.

Back to Table of Contents

NO SCALE

CITY OF ISSAQUAH PUBLIC WORKS DEPARTMENT APRIL 2010

TOP SOIL REQUIREMENTS FOR COMPACTED AND NON-COMPACTED SOILS

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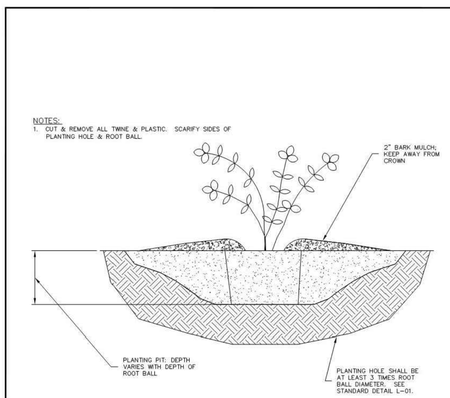
STANDARD DETAIL NO. L-02

REV:



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CITY OF ISSAQUAH PUBLIC WORKS DEPARTMENT APRIL 2010

TYPICAL SHRUB GROUND COVER PLANTING

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STANDARD DETAIL NO. L-04

REV:

NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL OTHER SITE IMPROVEMENTS AND CONDITIONS PRIOR TO STARTING LANDSCAPE WORK.

2. CONTRACTOR SHALL USE CAUTION WHILE EXCAVATING TO AVOID DISTURBING ANY UTILITIES ENCOUNTERED. CONTRACTOR IS TO PROMPTLY ADVISE OWNER OF ANY DISTURBED UTILITIES. LOCATION SERVICE HONE 1-800-424-5555.

3. CONTRACTOR SHALL MAINTAIN AND WATER ALL PLANT MATERIAL FOR 1 YEAR OR UNTIL FINAL INSPECTION AND ACCEPTANCE BY OWNER.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING QUANTITIES OF PLANTS THAT ARE REPRESENTED BY SYMBOLS ON THE DRAWING.

5. SUBGRADE IS TO BE WITHIN $\frac{1}{10}$ INCH OF 1 FOOT AS PROVIDED BY OTHERS. ALL PLANTING AREAS TO BE CLEARED OF ALL CONSTRUCTION MATERIAL AND ROCKS & STICKS LARGER THAN 2 INCH DIAMETER.

6. SEE STANDARD DETAIL FOR SOIL AND MULCH INFORMATION.

7. 2 INCH DEPTH, 3 FOOT DIAMETER BARK RING AROUND BASE OF STREET TREES AND OTHER TREES LOCATED IN LAWN.

8. TREES SHOULD BE PLANTED SO THAT THE CENTER OF EACH TRUNK IS 3 FEET FROM THE BACK OF CURB OR IF PLANTED BEHIND A SIDEWALK 3 FEET FROM THE BACK OF A SIDEWALK. WHERE TREES ARE TO BE PLANTED ADJACENT TO A SIDEWALK, A ROOT BARRIER SHALL BE INSTALLED ON THE SIDEWALK SIDE OF EACH TREE PARALLEL TO AND 6 INCHES FROM THE SIDEWALK. THE BARRIER SHALL BE 15 FEET LONG, CENTERED HORIZONTALLY ON THE TREE TRUNK AND EXTEND FROM THE GROUND SURFACE TO A DEPTH OF 18 INCHES.

9. GROUND COVERS SHALL BE PLANTED IN AN EQUILATERAL TRIANGULAR SPACING PATTERN AT THE ON-CENTER DISTANCES SHOWN ON THE PLAN OR IN THE PLANT SCHEDULE. WHERE GROUND COVER ABUTS CURBING, SIDEWALKS, SIGNS OR POLES, MINIMUM PLANTING DISTANCES SHALL BE 12" FROM CENTER OF PLANT TO CURB, SIDEWALK, ETC. MINIMUM PLANTING DISTANCE SHALL BE 24" FROM CENTER OF TREES AND SHRUBS.

10. ALL PLANT MATERIAL SHALL BE FERTILIZED WITH AGRO TRANSPLANT FERTILIZER 4-2-2 PER MANUFACTURERS SPECIFICATIONS.

11. ALL PLANT MATERIAL SHALL CONFORM TO AAN STANDARDS FOR NURSERY STOCK LATEST EDITION. ALL PLANT MATERIAL FURNISHED SHALL BE HEALTHY REPRESENTATIVES, TYPICAL OF THEIR SPECIES OF VARIETY AND SHALL HAVE A NORMAL GROWTH HABIT. THEY SHALL BE FULL, WELL BRANCHED, WELL PROPORTIONED, AND HAVE A VIGOROUS WELL DEVELOPED ROOT SYSTEM. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. TREES, SHRUBS AND GROUNDCOVER QUANTITIES, SPECIES, VARIETIES, SIZES AND CONDITIONS TO BE AS SHOWN ON THE PLANTING PLAN. PLANTS TO BE FREE OF DISEASE, INJURY, INSECTS, DECAY, HARMFUL DEFECTS AND ALL WEEDS. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT O OWNER.

12. NO PERMANENT IRRIGATION SYSTEM IS PROPOSED. TEMPORARY IRRIGATION SHALL BE REQUIRED FOR THE FIRST 3 YEARS OR UNTIL PROPOSED PLANT MATERIAL IS ESTABLISHED. PLANT MATERIAL SPECIFIED TO BE NATIVE OR DROUGHT TOLERANT AS DETERMINED BY LANDSCAPE ARCHITECT.

13. TREES TO BE PLANTED A MINIMUM 5 FEET FROM PROJECT BOUNDARIES.

14. THE AVERAGE SPACING FOR STREET REES SHOULBE BE 30 FEET ON CENTER AND ADJUSTED TO ALLOW FOR SIGHT LINES, UTILITES, TRAFFIC SIGNS, LIGHT STANDARDS, DRIVEWAYS AND OTHER STREET APPURTENANCES.

Drawn: JMV
Checked: JMV
Date: 7/22/22 REVISED
2. 6/21/22 REVISED

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CERTIFICATE NO. 634

MCLEAN SUBDIVISION
236th AVENUE SE, ISSAQUAH
LANDSCAPE PLAN

SHEET
L-2
OF x SHEETS

STREET LTG LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	DESCRIPTION	MOUNTING	MODEL	INPUT VA	VOLTS
STL-1		STREET LIGHT	POLE	Leotek Electronics USA LLC, GCM1 60J MV 30K 3R XX 100	65	120V 1P 2W

FLAG NOTES

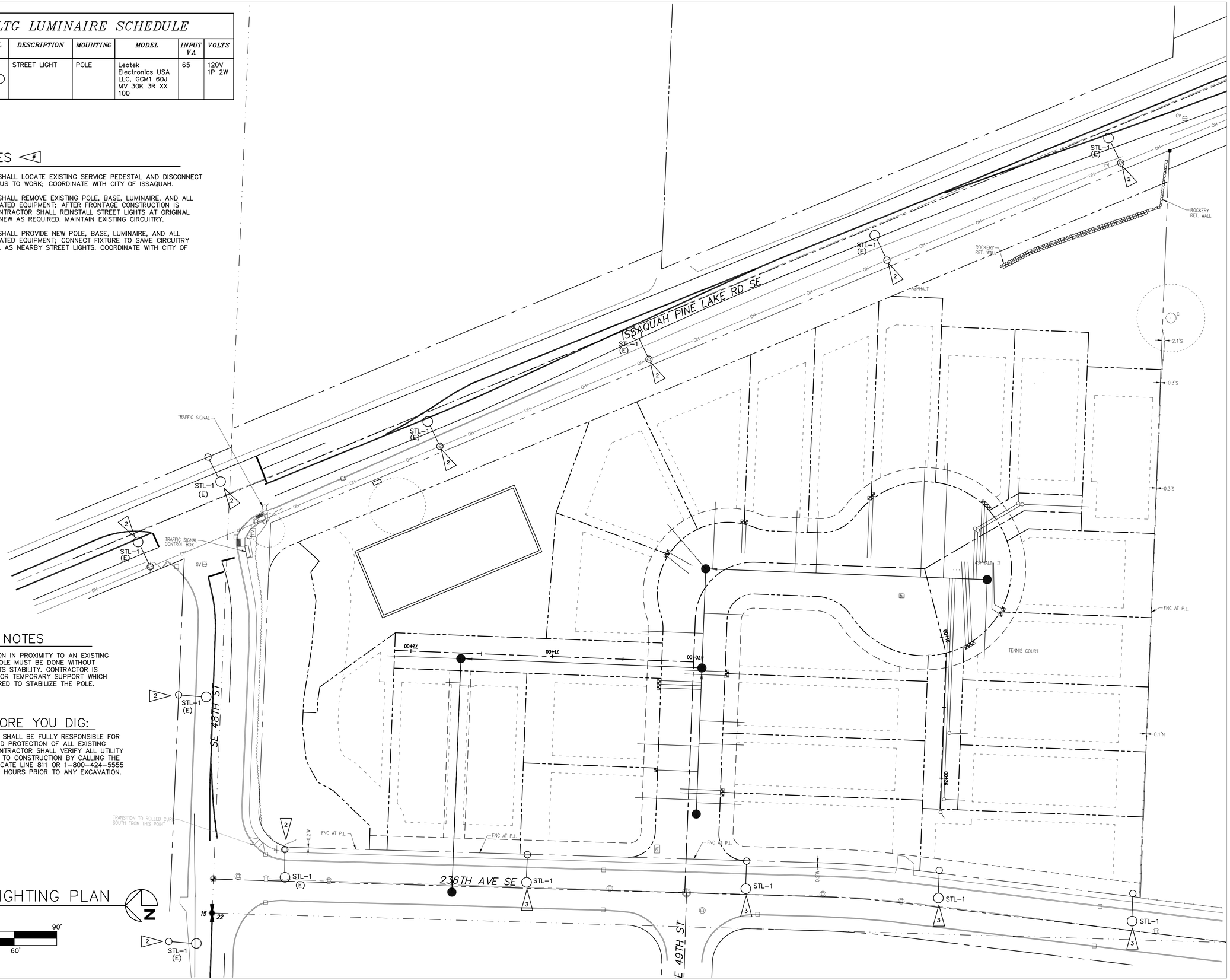
1. CONTRACTOR SHALL LOCATE EXISTING SERVICE PEDESTAL AND DISCONNECT POWER PREVIOUS TO WORK; COORDINATE WITH CITY OF ISSAQUAH.
2. CONTRACTOR SHALL REMOVE EXISTING POLE, BASE, LUMINAIRE, AND ALL OTHER ASSOCIATED EQUIPMENT; AFTER FRONTAGE CONSTRUCTION IS COMPLETE, CONTRACTOR SHALL REINSTALL STREET LIGHTS AT ORIGINAL LOCATION OR NEW AS REQUIRED. MAINTAIN EXISTING CIRCUITRY.
3. CONTRACTOR SHALL PROVIDE NEW POLE, BASE, LUMINAIRE, AND ALL OTHER ASSOCIATED EQUIPMENT; CONNECT FIXTURE TO SAME CIRCUITRY AND PEDESTAL AS NEARBY STREET LIGHTS. COORDINATE WITH CITY OF ISSAQUAH..

GENERAL NOTES

1. ANY EXCAVATION IN PROXIMITY TO AN EXISTING STREETLIGHT POLE MUST BE DONE WITHOUT UNDERMINING ITS STABILITY. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SUPPORT WHICH MAY BE REQUIRED TO STABILIZE THE POLE.

CALL BEFORE YOU DIG:

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE 811 OR 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



STREET LIGHTING PLAN

SCALE: 1" = 30'

0' 30' 90'

15' 60'

N

CONSULTANT

ROBISON ENGINEERING, INC

19401 40TH AVE W. SUITE 302
LYNNWOOD, WA 98036
PHONE:(206)364-3343
CONTACT: SHANE MCCLURE
REI # 1047-003

CLIENT/OWNER

PROJECT NAME

MACLEAN SUBDIVISION STREET LIGHTING

PROJECT ADDRESS

S.E. 48th STREET & ISSAQUAH PINE LAKE RD. S.E.
ISSAQUAH, WA 98029

STAMP

MARK D. ROBISON
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER

05-17-22

REVISIONS

REV	ISSUED FOR:	DATE

PROJECT TEAM

REVIEWED BY: M.D.R.

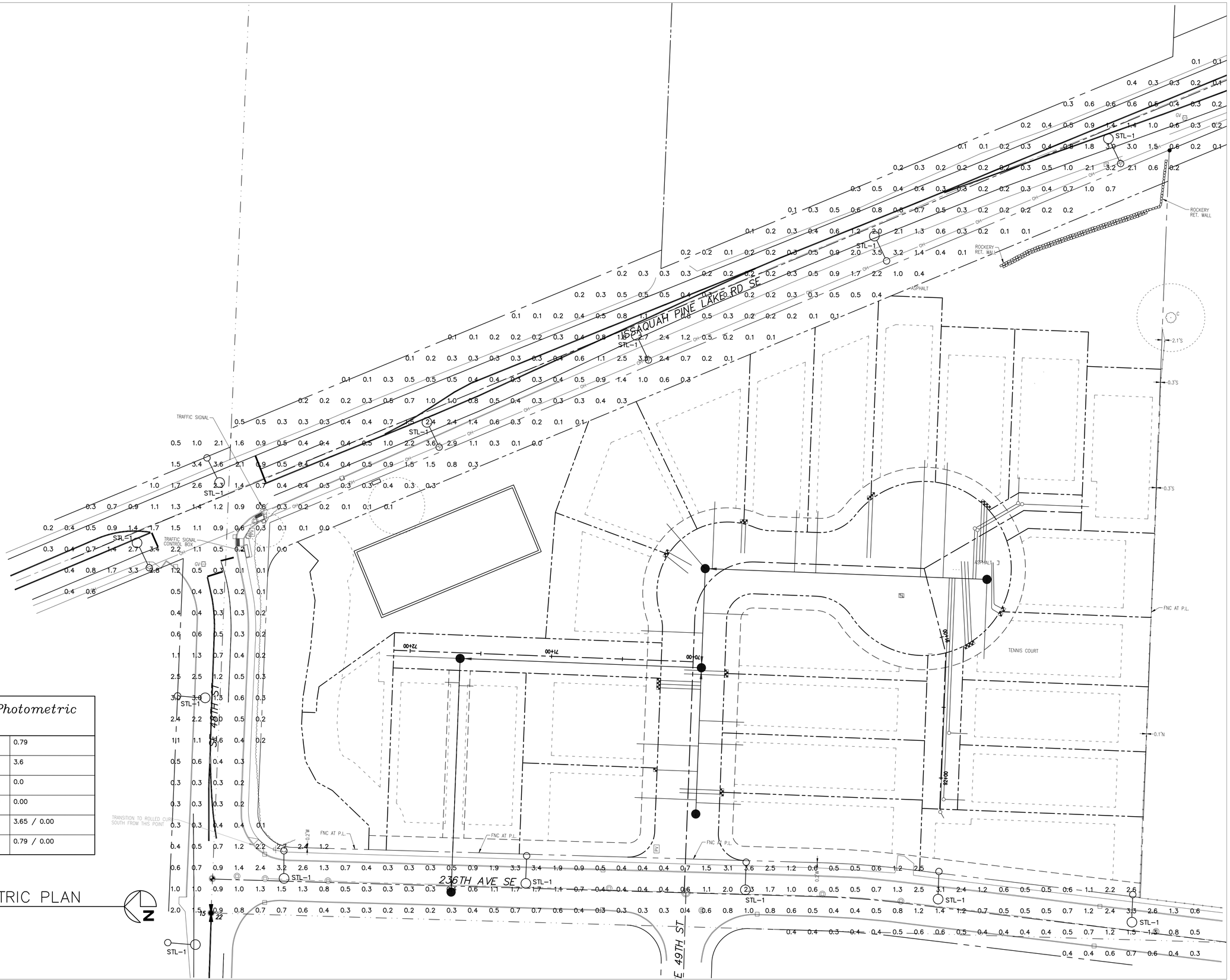
DESIGNED BY: S.M.

SHEET NAME

STREET LIGHTING

SHEET NUMBER

E1.01



General Photometric Schedule

AVERAGE FOOT-CANDLES	0.79
MAXIMUM FOOT-CANDLES	3.6
MINIMUM FOOT-CANDLES	0.0
MINIMUM TO MAXIMUM FC RATIO	0.00
MAXIMUM TO MINIMUM FC RATIO	3.65 / 0.00
AVERAGE TO MINIMUM FC RATIO	0.79 / 0.00

PHOTOMETRIC PLAN

SCALE: 1" = 30'

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MARK D. ROBISON — STATE OF WASHINGTON — 19961 — REGISTERED PROFESSIONAL ENGINEER

05-17-22

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DESIGNED BY: S.M.

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STREET LIGHTING PHOTOMETRIC CALCULATIONS

SHEET NUMBER

E1.02

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5. Design Guidance

The Developer is responsible for design, installation or relocation of new or existing lighting. Commercial development shall replace existing lighting systems on power poles with a new lighting system serviced by underground power if the system will not conflict with essential distribution lines.

All street light installations; including wiring, conduit and power connections, shall be located underground. Exception: existing residential areas with existing above ground utilities may have street lighting installed on the existing power poles.

Record drawings are required for all new or relocated underground street lighting systems prior to receiving a final occupancy permit. See As-built requirements.

6. Design Standards

Street lighting system designs are to be prepared by a licensed engineer experienced with lighting design. Calculations should include; luminaire spacing, illumination level, uniformity ratio, line losses, power source and other necessary details for the electrical and physical installation of the street lighting system. The lighting engineer shall design the illumination system per the Washington State Department of Transportation (WSDOT) Design Manual Chapter 1040.

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In that the City finds municipal ownership and operation of street lighting is more costly to the City and its residents than is ownership and operation by a private public service utility, it is the City's policy to allow Puget Sound Energy to construct, operate and maintain all lighting fixtures on public and private streets; and to construct, operate, and maintain all electric appurtenances required by such street lighting.

The City recognizes that one type of lighting fixture is not satisfactory for each section of the community and therefore has subdivided the City into three categories for lighting purposes. Those categories are residential, commercial and municipal. Exceptions to these standards will occur within the City's Comprehensive Plan. There are areas of the City that would require decorative lighting (i.e. Olde Town). Within each area the Standard Specifications are:

1. Plats and other Non-Single Family Development

Street lighting is required for all public streets in plats and other commercial, multifamily, and developments and redevelopments larger than a single family residence and along right of ways which front the development. The street lighting design shall be reviewed and approved by the Engineer prior to final plat approval.

Street lighting is required on private streets within a plat and along right of ways which front the plat or as determined by the City Engineer. The City does not install or maintain private street lighting systems.

2. Short Plats

A street lighting system shall be installed on public streets in or abutting a short plat development. The system shall be installed to Standards for arterial or local streets.

3. Existing Residential Areas

If a resident or group of residents desire the installation of a new street light they must apply to the City Engineer.

Cost of the installation of a new street light will be at the expense of the applicant per a completed cost matrix by the Public Works Engineering Department determining the percent to be paid by the applicant.

4. Existing Commercial Areas

If a business or businesses desire the installation of a new street light they must apply to the City Engineer.

Cost of the installation of a new street light will be at the expense of the applicant.

J. Street Illumination

The following provides the City's general specifications for the types of street and public area lighting fixtures in the right-of-way as a guide to developers, planners, and City personnel in planning for, or installing those lighting fixtures within the right-of-way of the City of Issaquah. For lighting standards outside of right-of-way see IMC 18.07.107 "Outdoor lighting". Definitions are as follows:

"Luminaires" – The lighting head which provides the actual illumination.

"Standard" – The pole or post which supports the luminaire.

"Puget Sound Energy" – Puget Sound Energy Company.

"Public Area" –. Those portions of a development intended for routine use and/or passage by the general public or customers or visitors to the development. Public areas include, but are not limited to, parking lots, driveways, walkways, and plazas..

"Street" – A public or private thoroughfare affording a principal means of access to abutting property.

It is the goal of the City of Issaquah to insure that a multiplicity of street lighting fixtures does not detract from the desired harmonious aesthetic values of the City; and to insure that the lighting fixtures used are both cost effective and maintainable.

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7. Illumination Levels

Light Level and Uniformity Ratio Chart					
Highway Design Classification	Minimum Average Maintained Horizontal Light Level[1]			Maximum Uniformity Ratio[3]	Maximum Veiling Luminance[4]
	Pedestrian/Area Classification				
	High (footcandles)	Medium (footcandles)	Low (footcandles)		
Principal Arterials					
Main Line	1.6	1.2	0.6	3:1	0.3:1
Intersections	1.6	1.2	0.9	3:1	0.3:1
Minor Arterials					
Main Line	1.2	0.9	0.6	4:1	0.3:1
Intersections	1.2	1.0	0.9	4:1	0.3:1
Collectors					
Main Line	1.1	0.8	0.6	4:1	0.3:1
Intersections	1.1	1.0	0.9	4:1	0.3:1
Local Streets	0.3	0.3	0.3	None; 300 foot max. spacing	
Other Illuminated Features					
Transit Stops[2]	2.0	2.0	2.0	NA	0.3:1
Midblock Ped Xing	2.0	2.0	2.0	3:1	0.3:1

Notes:

a) Light level and uniformity ratio apply only when installation of more than one light standard is justified.
b) For single light standard installations, provide the light level at the location where the bus stops for riders (see Design Manual 1040.06(6))
c) Minimum Average Maintained Light Level/Minimum Light Level = Maximum Uniformity Ratio
d) Maximum Veiling Luminance/Average Luminance = Maximum Veiling Luminance Ratio
e) Lighting designed to minimize spill over to private property or sensitive environmental areas
f) The illumination levels for public and private streets shall be designed in accordance with these standards and will not be considered a conflict with the land use code.

8. Illumination Equipment

The type of illumination equipment varies by location and use. Mounting height and wattage will be dependent on an illumination analysis that is consistent with the illumination levels mentioned in the previous section,

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10. Illumination Electrical Guidance

All street lights shall be on two hundred forty volt (240v), single phase systems. The exact location of the power source should be indicated together with the remaining capacity of that circuit. System continuity and extension should be considered. (Provision For 110V plug on the Light Standards shall be considered)

Contractor cabinets equipped with electrical meters, circuit breakers and other required components are required on commercial installations of five (5) or more streetlights.

All street lighting wiring, conduit, service connections shall be located underground except in residential areas where existing power distribution poles exist.

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however, the mounting height will not exceed thirty-five feet (35') and fourteen feet (14') in the Olde Town area. In other special land use district areas that are created, this criteria may vary.

Fixture type and pole type are dependent on location and classification of area:

Lighting Area	Fixture	Pole Type
Local Roads	Cobra head, flat glass lens	Steel
Principal and Minor arterial	Shoebox head and flat glass lens	Steel
Transit Stops and Mid-Block Crossings	Cobra head, flat glass lens	Steel
Multi-use paths and trails	Shoebox head and flat glass lens	Fiberglass, Steel

In general, High Pressure Sodium (HPS) shall be used for all applications. Use of alternative light emitting devices that reduce electricity consumption while maintaining adequate light levels as defined in the previous section is encouraged.

9. Exceptions

a) It is further recognized that in certain locations and within areas which are being planned and designed as a cohesive unit, that landscaping and architectural styles may require street lighting fixtures to be of a unique and individual style. In such cases, lighting fixtures other than those specified above may be used, given: the desired lighting fixtures are completely and accurately described and depicted in the project's development plan, that projected annual maintenance and operation costs are presented, replacement costs, by component, are listed and the lighting fixtures are reviewed and approved as a separate item within the City's overall project review and approval process.

b) In the Olde Town Area, lighting fixtures shall comply with the IMC 18.19, Olde Town Design Standards. Maximum height of fixture is 14 feet, all lights shall be shielded from the sky and adjacent properties and structures, and use of pedestrian scale lighting and/or bollard lighting shall be used to reinforce the historic nature of Olde Town Issaquah.

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REVISIONS

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PROJECT TEAM

REVIEWED BY: M.D.R.

DESIGNED BY: S.M.

SHEET NAME

STREET LIGHTING DETAILS

SHEET NUMBER

E1.03